SPEED-O-KNIT BY PASSAP®

HOME INSTRUCTION COURSE

by Liz Blackwell

A SERVICE OF THE SPEED-O-KNIT HOME KNITTING INSTITUTE

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How to Care for Your Speed-O-Knit at Home

HOME CARE FOR SPEED-O-KNIT

CLEANING

Remove lock. Take drawer or drawers out. Put knitter in hot soap suds and water. Use a regular scrub brush and scrub clean. Be sure to rinse thoroughly so that no soap is left on the knitter. Clean lock in the same way. Dry as completely as possible. You can use a vacuum attachment, ordinary hair dryer, or a compressor, if available. Place in warm place to dry, turning knitter upside down.

OILING

Use Pfaff Sewing Machine oil. Put a little oil on a cloth and wipe along these parts: on the lock--side and bottom of runners, both sides of flippers, edges of the free move cams; on the bed--oil the needle butts ONLY.

CHANGING NEEDLES

This is seldom necessary--but just in case. Turn knitter over. Underneath the needle bed you will find eleven latches, or clamps. Pull each one up. Turn knitter right side up. Lift the red numbered bar. Take hold of the butt of the needle you wish to replace; slide the needle slightly forward; then lift it up; pull it back and out. Replace with new needle and secure clamps on underside.

ADJUSTING LOCK

If your yarn is tearing and breaking, the lock is probably pressing too tightly against the striking pins. Or, if the lock seems stiff in working, the same thing is true. To correct: While lock is on knitter, take hold of the stripper with both hands and pull slightly toward you away from the striking pins.

If, after you've worked a row, the stitches all come forward with the needles or do not go back of the latches, the lock is not pressing close enough to the striking pins. To correct, simply reverse the above procedure by pushing stripper away from you toward striking pins.

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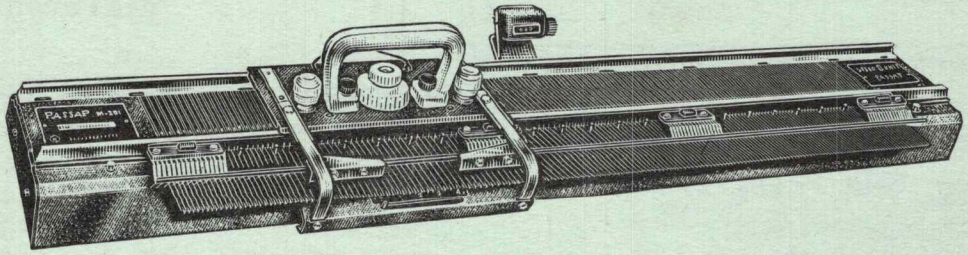
LESSON NO. 1

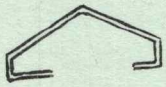
Before starting on this first lesson, familiarize yourself with the following parts:



NEEDLE BED: Flat top surface that holds the needles.

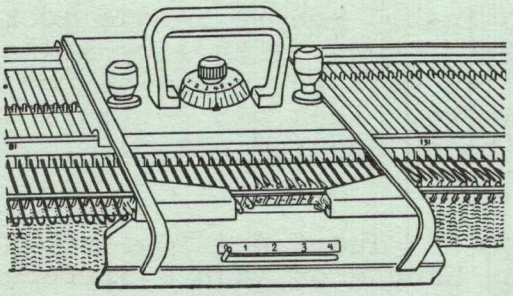
ROW COUNTER: Attachment at the back of the knitter which counts rows automatically.

TRIPPER: Triangular metal piece that fits at the back of the lock and trips handle on row counter to make it register. (Tripper is slightly visible, back of handle, in above picture.)



NUMBERED BAR: Red plate along the entire length of knitter numbered from 0 at the center. It enables you to keep track of the number of stitches you want, or are using. (Not clear in picture, but easily found on knitter.)

LOCK: Includes the following parts:



HANDLE

TENSION CONTROL: Knob directly under handle. To set, first unscrew knob and set dial to number wanted so that number is directly at small pointer. Then tighten top knob.

FREE MOVE KNOBS: Two knobs at either side of the handle.

STRIPPER: Entire front section of the lock. Stripper tension is numbered 0 to 4.

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LESSON NO. 2

FREE MOVE

It is important that you learn to use free move automatically without even stopping to think about it. Practice a lot on this. Again, read and do one step at a time.

Keep in mind these two points:

a. If you ever move lock across when the needles are in working position without first laying the yarn across the needles, ALL YOUR WORK WILL FALL OFF.

b. Get in the habit of removing the row counter when you use free move because you do not want rows to register on the counter when they do not actually form a new row.

As in Lesson 1, cast on 40 stitches and work 20 rows. Yarn and lock are at the right. We shall now put the needles in free move.

1. Lay yarn across needles.

2. Raise the free move knob at the right (always the outside knob).

3. Move lock across to the left. This forms a knit row and also puts the needles in partial free move position. Immediately remove the row counter.

   Please note the difference in free move and in working position.

   a. You have knit a row, but the needles have not been returned to working position.

   b. All stitches are in the hooks of the needles and in front of the latches.

   Take hold of your work and pull down on it quite heavily. Notice that this can be done and that you cannot pull the stitches off the needles. This is one of the important features of free move.

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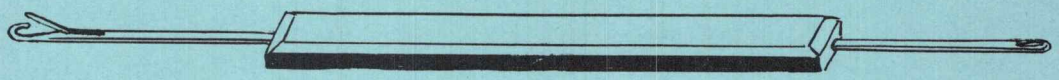
LESSON NO. 3

USE OF GREEN TOOL



The green tool is used for ribbing and picking up dropped stitches. One end is a decker needle; the other end, if you will notice, is a latch needle. It is the use of the latch end that is most important.

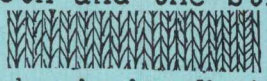
We are going to learn ribbing first because for this you use the green tool on the front of the work. Thus it is easier to see. (For dropped stitches, you use the tool underneath the work.)

Knitting on Speed-O-Knit has the purl side facing you. This is because the yarn is pulled through the stitches, causing the stitches to pull off the needles forward, or towards you.

To make a knit stitch, the stitches would have to slide off the needles away from you.

The difference between the purl and knit sides of your work is this: The purl side is "bumpy" and the stitches look horizontal.

The knit side is smooth and the stitches are vertical.



The stockinette stitch, in handknitting, consists of a repetition of knit 1 row, purl 1 row, thus giving a right and wrong side to your work. The knit side is referred to as the right side.

The stockinette stitch on Speed-O-Knit is made automatically, and again you have a right and a wrong side.

Ribbing is a combination of knit and purl in stitches, rather than in rows. The combinations used the most are knit 1, purl 1 and knit 2, purl 2.

If you have never handknit and there is still a question in your mind about ribbing, look at a pair of men's socks or a machine-knit sweater. The top of the socks and the waist and sleeve bands of the sweater are ribbed to give elasticity to the bands.

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LESSON NO. 4

SIDE INCREASING AND DECREASING

Handknit garments are shaped as they are knit. A great many commercial machine knits are knit in yardage, then cut and sewn. This, too, can be done on Speed-O-Knit, but since there would obviously be a waste of yarn, it is much easier to learn to shape correctly (and a lot more fun).

This lesson will be only on side shaping. In other words, all increasing or decreasing will be done at the seam. (The other method, increasing or decreasing across the row, will be taken up in a later lesson.)

INCREASING ONE STITCH AT A TIME

1. Cast on the two center stitches.
2. Work two rows. Yarn is at the right.
3. Bring next empty needle (No. 2 at right) from neutral into rest position.
4. Wrap yarn around this needle, exactly as you cast on.
5. Be sure latch is open.
6. Put needle in working position.
7. Work the row. Yarn is now at the left.
8. Bring next empty needle (No. 2 at left) from neutral into rest position.
9. Cast on, by wrapping yarn in the opposite direction. (Bring yarn up on the outside of the needle, over the needle, and back down.)
10. Open latch and put needle into working position.
11. Knit the row. Yarn is back at the right.

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LESSON NO. 5

USE OF CONTRAST YARN

By contrast yarn we mean yarn of another color which shows up vividly against the main color you are using. We use contrast yarn in doing many things on Speed-O-Knit, the main purpose being to hold certain stitches in place that are to be used later.

We use this method to do the following things:

1. Hold stitches that are to be ribbed later.
2. Take some of the stitches off the needles and hold them to be worked later, such as for heels of socks, one side of the neck, etc.
3. Increase or decrease across the row.
4. Turn work. (The basic principle of garter stitch, although we do not attempt much garter stitch as this would mean turning work every row.)
5. Hold stitches of one piece that you want to join, on the knitter, to a second piece, such as the shoulders.

Before starting, in order to see the real value of using contrast yarn, do this:

1. Cast on 10 stitches.
2. Work 20 rows.
3. Move lock across without yarn so work drops off. (From now on we shall refer to this procedure as "Remove Work."

This is going to happen to you now and then accidentally, usually because you get going quite fast and somehow neglect to lay the yarn across some or all of the needles--and off comes the piece. If you have done just a few rows when this happens, it is just as easy to rip and start over. But if you have a good many inches of the garment already knit, you certainly don't want to rip it all out. You want to be able to replace your work and continue. This can be done very easily as follows:

1. If part of the last row has knit, pull out the partial row so that yarn is at one end.

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LESSON NO. 6

SHORT ROWS

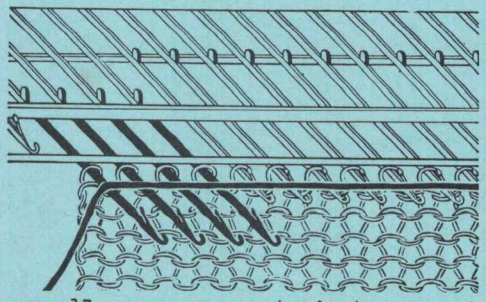
A short row is simply a portion of one row. In order to obtain certain shapes and effects, you work only parts of rows.

Short rows are used for the following:

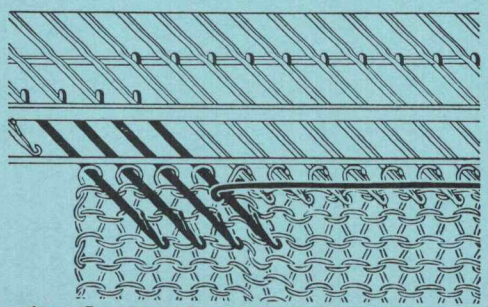
1. Turning heels of socks
2. Pockets
3. Horizontal darts
4. Circular pieces
5. Zig-zag pieces
6. Mitering

There are many other uses for short rows. However, these listed will give you enough experience and variety so that you, yourself, will be able to think of a lot more uses.

A short row is made by putting one or more needles into rest position so that these needles stop working while you knit on the remaining ones.



Four needles are put into rest. Row is worked to this point.



Yarn is looped around closest needle that is in rest and is in position to be worked back to the right.

REMEMBER, when using short rows, after you knit up to the needles that are in rest, UNLESS OTHERWISE STATED, yarn must always go around or over the closest needle put in rest before you work the next row. If you forget to do this, you will have a space or hole at every short row division.

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LESSON NO. 7

STRIPPER

So far we have not mentioned the stripper, and I trust you have through your earlier lessons kept the spring set at 0.

The adjustment on the front of your stripper controls the two plastic guards that rest against the striking comb. The adjustment is so slight that it cannot actually be seen. However, you can feel the difference in your knitting.

Cast on for a swatch. Set tension at No. 4. Work 10 rows with stripper set at 0. Then move setting on stripper to No. 4 and work 10 rows. You will see that the lock moves slightly tighter now because the plastic guards have been moved closer to the striking comb.

The blue manual suggests setting the stripper at different numbers for different weight yarns. Personally I have never found this necessary. I use the stripper on 0 for all plain knitting. The main use I have found for the setting on the stripper is in pattern work where rest position is used and a needle remains in rest for several rows, with yarn lying across this needle for that number of rows. With stripper set at four you are sure that all these loops will be worked off when desired.

Another instance of using the stripper set on No. 4 is in doing lace patterns where you have more than one stitch on a needle and want to be sure both work off.

You certainly can experiment with the stripper settings and judge for yourself. I have had knitters tell me that when the stripper is set at No. 4 they get fewer rows to the inch than when set at 0. I have never found this to be true with my own knitting. But remember this. In knitting, whether by hand or with Speed-O-Knit, there are no two people who knit the same. There is still too much of the human element involved, such as, holding the yarn. There is no way to have everyone using Speed-O-Knit hold the yarn in exactly the same way. So what works for one person may not work for another. The main point is--try out your own knitter and see what is best for you. Then stick with it.

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LESSON NO. 8

USE OF DECKER NEEDLES

So far you have used the decker needle in moving stitches for decreases, etc. It is also used in making lace patterns.

In two-needle handknitting, a great many lace patterns are made by knitting 2 stitches together, then making a loop around the needle for an added stitch. Normally when 2 stitches are knit together, it is a decrease. Therefore, in a pattern where the number of stitches must remain the same, the loop creating the new stitch also creates the lace pattern.

Since you will doubtless be using some handknit directions, it is well to understand what they mean.

2 together, yarn over. This means you knit 2 stitches together, then loop yarn around needle. On the purl row this loop is purled as though it were a stitch, thus making a stitch.

Yarn over, 2 together. This is the reverse of the above. First you loop the yarn over the needle, then work the 2 stitches together.

The main reason for doing this in these two ways is simply to set the eyelet in certain places in order to create certain patterns.

Slip 1, knit 1, pass slipped stitch over (PSSO). This is actually the same as knit 2 together, except that the decrease slants to the left. When you knit 2 together, the decrease slants to the right. By using these 2 methods, it is possible to have opposite sides correspond or to make part of a pattern.

Slip 1, knit 2 together, pass slipped stitch over. This is done for the same reason, but since you knit 2 together and also pass slipped stitch over, you have a decrease of 2 stitches rather than 1. This is usually done at the point of a lace pattern.

On Speed-O-Knit all these things are possible and are done in practically the same way. (Always set stripper on No. 4 when doing lace pattern work.)

2 together, yarn over. Using decker, remove stitch from needle and place it on the needle immediately to the right. This gives you the 2 together and yarn over. The empty needle forms the yarn over. Be sure that both stitches are back of the latch and that the empty needle is left in working position with latch open.

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LESSON NO. 9

GRAPH WORK

We use the above term to mean any kind of multi-colored pattern that is not an all-over pattern. All-over patterns are usually referred to as Fair Isle patterns. The term "graph work" is used because the pattern is usually outlined, or laid out, on graph paper. In knitting books, most graph patterns are so small they are extremely tiring on the eyes. May we suggest that you buy a pad of graph paper at a stationery store. These pads can be purchased in all sizes, even in large single sheets. We suggest using graph paper that has 4 or 5 squares to the inch.

It is a simple matter to copy the graph you intend using on these larger squares. Then you can number rows and stitches and even use crayons to show different colors. It is very easy then to read at a glance.

There are two kinds of graph work on the market that are excellent. One is put out by Grace Ennis and is called Graphic Knitting. These are exceptional sock and tie patterns done in color and well marked. They can be purchased from most yarn shops and art needlework departments. There is a large variety and they sell for 25 cents a copy. All these patterns can be used on Speed-O-Knit.

The other is called Knit-O-Graph, and you will find these advertised in McCall's Needlework. This company puts out a line of patterns for children's sweaters, charted in full size, and the graphs are very clever. They can be ordered by mail, and these patterns, too, can be followed on Speed-O-Knit simply by getting the correct gauge.

As you progress, you will want to create your own individual designs. But if you can't draw, you can still obtain many clever ideas from cross-stitch patterns. The reason cross-stitch patterns are so adaptable is because they are geometric designs, done in straight lines, and in knitting, you simply use one stitch of color to represent one cross stitch.

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LESSON NO. 10

DIVIDED RULER

The divided ruler is the one that has slots on either side. It is also referred to as the pattern ruler. One side has smaller divisions than the other. This is referred to as the 1x1 side. The other side is the 2x2 side. This ruler is used to set needles in certain ways for patterns.

Take your divided ruler. Notice that on the 1x1 side there is a small guide point. This point fits into the needle channel. Hold ruler, grey side facing you, in back of needle butts, 1x1 side down, so that the needle butts are between you and the ruler. Be sure the guide point of the ruler is directly back of one needle. Bring ruler toward you and every other needle comes into position, leaving the others in neutral.

Push all needles back to neutral. Turn ruler so that the 2x2 side is down, and back of needles, with guide point directly in back of one needle. Bring ruler toward you, and you now have needles in sets of 2 in position, the others in neutral.

Push all needles back into neutral. Use the 1x1 side and bring the needles into rest position. Turn ruler so grey side is toward you, the 2x2 side down. Place ruler between you and the needle butts that are in rest with the guide point of the 2x2 side back of the first needle on the right. Now push ruler back to neutral. You now have a division of 3x1.

In your blue manual use of the divided ruler is explained in this way:

In bringing needles forward place 1x1 side BEHIND first needle; then place 2x2 side IN FRONT of first needle. Just remember that when directions call for ruler behind work, the ruler is placed so that the needle butts are between you and the ruler, and you bring the needles toward you. When directions call for ruler in front of needles, the ruler is placed between you and the needle butts that are in rest and you push ruler away from you.

Let's look at some of the patterns in the blue manual.

Set stripper on No. 4 for all of these patterns. Save swatches. For these swatches, cast on 40 stitches and work 2 rows. Then start pattern.

Pattern 1

First read the pattern as written in the blue manual. This is what it means:

Row 1: Raise right knob; work row with contrast. Push knob down and return lock to right.
Row 2: 1x1 side of ruler, guide point back of first needle at right. As you bring needles forward into rest, hold onto work under needles against back of knitter. (If you do not do this, you will soon discover that as you bring the needles forward, the work comes right along. Then you must take the time to push work back and get all the needles lined up again.) Work row with main color.
Row 3: Push needles in rest back into working position. Raise left knob. Work row with contrast. Knob down, return lock to left.
Row 4: 1x1 side, guide point back of second needle at right (always set pattern from same side, right to left) and bring these needles into rest. Work row with main color. Needles in rest back into working position.

Now both colors of yarn and the lock are at the right. Repeat from row 1.

Pattern 2

First try the directions as written. Then try these.

Row 1: Work with main color.
Row 2: Work with main color
Row 3: 2x2 side back of needles, guide point back of second needle from right. Bring needles into rest. (The first 2 needles at right come into rest.) Work with contrast.
Row 4: Work with contrast. Put all needles back into working position.
Row 5: Work with main color.
Row 6: Work with main color.
Row 7: 2x2 side back of needles, guide point back of fourth needle from right. Bring needles into rest. (This leaves the first 2 needles at right working, the next 2 in rest, etc.) Work with contrast.
Row 8: Work with contrast. All needles back into working position.

Repeat from row 1.

Skip pattern 3.

Pattern 4

Try as written. You should have no trouble with this one.

Pattern 5

Try pattern as written. Then try it this way.

Row 1: 1x1 side back of needles, guide point back of first needle. Bring needles into rest. Work with main color.
Row 2: Leave needles as they are. Work with main color. BRING ALL NEEDLES IN WORKING POSITION INTO REST.
Row 3: Put guide point of 1x1 side in front of the first needle at the right that has both colors. Push these needles into working position. Work with contrast.
Row 4: Needles in same position, work with contrast. Bring all needles still in working position into rest.

Now you only have to repeat rows 3 and 4, alternating the colors.

Here is why I think this last method is easier. According to the blue manual, after working 2 rows with 1 division, you put the needles back into working position, then use the ruler to make the second division. You have probably noticed that in bringing needles into rest, when work is on them, it is extremely necessary that you hold the work in place either with your left hand or with the block ruler. Otherwise, the work comes forward with the needles. By using the above method, after you have done 2 rows with one color, although you still have to hold work when bringing the remaining needles into rest, you do not have to hold work when you push the correct needles into working position. Neither do you have to refer to the directions since all you have to remember is this: Knit 2 rows with 1 color. Then before changing colors, push the needles that have both colors back into position.

Try this idea using 2x2 division so that your stripes are 2 stitches wide instead of one.

Pattern 6

Work as directed. This is a simple pattern, in that the same needles are put in rest for the pattern each time and you don't have to worry about alternating needles.

Pattern 7

Work as directed, remembering to use free move to insure having lock at correct side for the color you want.

In starting out, since contrast is not yet in use, work the 2 rows with main color. Then set pattern for row 3, that is to be contrast; raise right knob so that after working row, you can push knob down and return to right side for main color.

Row 4: Work with main color
Row 5: Before doing this row, notice that you must raise left knob so that, after working row with main color, you are able to return to the left where contrast is hanging to be able to use contrast.

Continue, remembering to think far enough ahead to use free move when needed.

You can skip pattern 8 as it is done with one color only and try instead the diamond pattern and the mock popcorn pattern explained in the book of "Hand-Knit Fashions for Speed-O-Knit."

Pattern 9

Work as directed, using free move. Notice the variation given below this pattern. In working two-color patterns such as this, I always change and use even-numbered rows of each color, thereby eliminating the use of free move and also keeping accurate row count.

Pattern 10

This is like pattern 9, but a smaller division. After completing this, work the honeycomb pattern on page 32 of "Hand-Knit Fashions for Speed-O-Knit." This is the same as the one in the blue book, using even-numbered rows.

Pattern 11 is self-explanatory, and you have already done pattern 12.

As you can see, you have made good use of your divided ruler in working these patterns. However, if you would like to make patterns that are even more varied, you may be interested in another optional accessory obtainable through The Institute. This is the Passap Pattern Selector, which consists of 71 movable pins that can be set in any division you wish. Simply remove the locking bar, set the pins, and replace the bar to lock the pins in position. Then use in the same manner as the divided ruler.

CABLES

Study pattern 3 carefully. A cable stitch is simply a matter of crossing certain stitches to form the cable. The cross, or cable, is made every certain number of rows. The important thing is that, unless a cable is set off from the rest of the work by a purled stitch, it will not show up.

Try doing pattern 3 as written and note that you are making what is called a 4-stitch cable. The cable twist is made by using 4 stitches, crossing 2 over the other 2.

You will find that in nearly all patterns, with the exception of children's clothes, directions always call for a 6-stitch cable.

Let's do a 6-stitch cable, eliminating the purled stitches.

Set the needles so that you have 6 working, 1 neutral, 6 working, 1 neutral, 6 working. Set counter at 0. Tension No. 5. Stripper at 0. Work 10 rows.

The center group of 6 stitches is to be the cable. Think of these 6 stitches by number, starting at the right, as

6 - 5 - 4 - 3 - 2 - 1

With red double decker remove stitches 3 and 2 and hold red tool horizontally below the needles, holding with left hand at decker end. (So the stitches won't slide off)
With blue decker remove stitch 1 and now hold both red and blue tools with left hand.
With yellow double decker remove stitches 5 and 4 and immediately replace them on needles 2 and 1. (Stitch 5 on needle 2. Stitch 4 on needle 1.)
With green decker remove stitch 6 and immediately replace it on needle 3.
Replace stitch from blue decker on needle 4.
Replace stitches from red decker on needles 5 and 6. (Stitch 3 on needle 6. Stitch 2 on needle 5.)

Cable twist is now complete.

Be sure stitches are back of latches and needles in working position. Work next row and PLEASE NOTE: As lock reaches the cable twist, it will probably stop. Since stitches are being twisted, the needles are held tightly in place and curved slightly. With your right hand, hit the handle of the lock as if you were hammering a nail. You will find the lock will go on across the cable, doing no damage to either the work or Speed-O-Knit. This is the only time you need do this, right after the twist is made. Never try to do cables on a tight tension or with a yarn that breaks when you look at it!

Work till counter reads 20. Make a cable twist as before. Then continue, making a twist every 10 rows. I always use a 10-row division in cables, simply because 10 is an easy number to work with, especially when using row counter and having to keep your mind on several things at once, such as shaping, while still cabling.

Since the above swatch eliminated the purled stitches on either side of the cable, now let's make one using the purled stitch. Most handknit cables have 2 purled stitches on either side. However, if you prefer, one on each side will be enough to set the cable off.

Cast on 20 stitches, using all needles (none in neutral).
Work 9 rows.
Work tenth row using free move.
Skip 6 needles at the right; drop next stitch to cast-on row and rib.
Skip the center 6 needles; drop next stitch to cast-on row and rib.
Remove counter and bring needles back into working position.
Make the cable twist on the center 6 stitches exactly as above.
Replace the counter and continue, putting needles into free move every 10 rows and doing the ribbed stitches before making the cable twist.

Now compare the two swatches and decide which you prefer. If you do use the purled stitches, remember it is easier and best to work the rib each time you make a cable twist.

To simplify the work of making cables, you may want a pair of cable needles, another optional tool available through The Institute. Each needle consists of three deckers, thus eliminating the necessity of using three separate tools.

IN CONCLUSION

There isn't much more I can explain to you about using Speed-O-Knit. If you have really worked on the previous lessons and let me know if you were having trouble, you should now know the full potential of your knitter. We have covered every operation; explained using different parts of the knitter and the tools and working out patterns. Now you should be able to take off on your own and have a lot of pleasure with your knitter.

The only thing we haven't discussed is yarns. On this subject I hardly know where to begin since the variety is endless. Probably the most important thing you should know concerns novelty yarns and heavy yarns. All lightweight yarns, such as sock and sweater yarns, and dress yarn, work easily on every needle. Worsted, or 4-ply, cannot be worked on every needle.

It would be too hard to push the lock; you couldn't get the correct gauge; and the knitting would feel like a board. Therefore, in working with worsted, use every other needle, or every third needle, tension set at 6, 7 or 8, depending upon the gauge you want. After you have made your swatch, be sure to pull stitches into place before measuring. (Refer to lesson on tension.) As you make a garment, while pieces are on the needles, don't worry that they seem wide and short. They will pull into place. In trying different yarns, just remember that if you find it an effort to move the lock, you should try using skipped needles. Among other yarns that should not be worked on every needle are chenille, corde and ribbon.

You have the basic pattern book, "Hand-Knit Fashions for Speed-O-Knit," which together with the blue manual and this series of lessons, should answer all questions. If you study carefully the charting instructions in the basic pattern book and follow them step by step, you should have no trouble. Charting is just simple mathematics. By studying hand-knit directions or the directions in the basic pattern book, you will see, almost at a glance, how the different sizes are obtained.

Every knitting pattern gives gauge. This means that whoever made that particular item got that gauge as she made it. It does not mean that you will get the same, even if you use the same yarn and the same size needles in handknitting, or the same yarn and same tension on Speed-O-Knit. Everyone's knitting differs. Also, people who wear the same size may have different body measurements. In handknitting books there is a wide variety of opinion as to what measurements belong to what size.

After you have chosen your pattern, even if it is in a Speed-O-Knit book, do this. Make a swatch of your yarn with the tension you wish. Check your gauge. If it is exactly the same as the gauge given in the pattern, good. But you still have further checking to do. Take the number of stitches called for at the waistline. Divide this number by the number of stitches given as gauge. This will give you the actual length of this piece in inches and you can see if it is the measurement you want for yourself. Check each width measurement in this way. Then you can easily make any changes needed before starting. This will save you a lot of ripping later when you find something doesn't fit.

If you select a pattern for a heavy worsted sweater which calls for 114 stitches, you are going to have to do some changing for this reason. You know that you can use only every other needle on Speed-O-Knit when working with worsted which means you have only 101 needles to work with. Therefore, you must either divide your pattern at the center or use a looser tension so that you will not need so many stitches, but will still get the same size.

Certain handknit patterns are impractical on Speed-O-Knit. One of these is garter stitch. To do the garter stitch, you would first work a row, take off on contrast, turn, replace, work another row, take off, etc.

Another is seed or moss stitch. This is a knit 1, purl 1 done on an uneven number of stitches, so that each new row puts the knit stitch over a purl, a purl stitch over a knit. To do this on Speed-O-Knit would mean changing every other stitch every row, which would soon be very boring. But you can get a good mock seed stitch by following pattern 1 in the blue manual, using only 1 color, but changing needle position each row.

You should also remember that patterns made on Speed-O-Knit, using needles in rest and working with one color, put the pattern on the purl side of your work, with only a shadowed effect on the knit side. If you are doing raised patterns or the mock seed stitch as above and want this only as a trim or band with the rest of your work in stockinette stitch, you must turn your work to get this effect. However, you have probably already discovered that taking stitches off on a contrast and turning work around is not such an involved process.

Remember the more you practice, the more proficient you become. Experiment and try out ideas of your own. Learn to watch the way certain pattern stitches are formed, and this will give you many ideas for variations.

Don't worry too much about the stitches that can't be done. Remember that ninety per cent of all knitting is based on the stockinette stitch. The majority of your color and lace patterns and the classic patterns are done in stockinette stitch.

We hope that these lessons have been helpful and that you have learned everything about using your Speed-O-Knit. Feel free to write us concerning any questions or problems that may arise. We shall always welcome ideas and suggestions in connection with these lessons.

Included in graph work is the old reliable argyle sock. Actually, this might be considered an all-over pattern, since the pattern does cover the entire sock; but it is wiser to make your first pair of argyles following a chart. After you have done a pair, you can easily work all sorts of argyles without using a pattern, since the pattern always is worked in a set way.

In doing work of this sort, you must use separate balls of yarn for each color. In two-color work (to be taken up in the next lesson) you will notice that, while one color is being used, the other remains stationary. Also, all loose stitches, such as the loops that lie over rest position needles, are neatly caught on the next row by the next color. This is almost impossible to do neatly in handknitting. Invariably you hold one color either too tightly or too loosely when working with the other. On Speed-O-Knit each color is held at the same tension.

In graph work never carry one color under more than 3 stitches. If colors are separated that much, use separate balls of yarn. In handknitting bobbins are used so you don't have to bother with a lot of large skeins of yarn. For graph work on Speed-O-Knit we recommend that you wind separate small balls of yarn as follows:

Hold the short end of yarn hanging down between thumb and first finger of left hand so that when you're through winding that end of yarn is still there. Wind yarn around index finger of left hand, one finger only. You don't want a loose ball that will easily unwind. Make the first wraps rather loosely since this will be the center of the ball. Then as you reverse the direction, gradually tighten up so that you have a nice compact ball of yarn, about the size of a walnut. Break yarn and with green latch, pull this last end under several rounds of yarn so ball will not unwind. This is called winding a ball from the center, and you work from the end that you have been holding all this time.

In starting a graph pattern, wind as many balls as you need, always keeping in mind that not only do you need a ball of color for each color section, but you also must have a ball of main color for each main color section.

Now let's make a single-colored diamond on another color background. This is the principle of the argyle sock, since an argyle is a diamond-shaped pattern.

Cast on 27 stitches with main color and work 2 rows. You are now ready to start pattern. Set counter at 0.

Row 1: Pull the center needle slightly forward, just so that you have it where you can see it plainly without having to stop and count. Lay the contrast color across the latch of this needle and pull the stitch through by hand. Put this needle in rest.
Lay main color, already attached to first needle at right, across the first 13 needles (all those at right of center stitch).
Lay end of second ball of main color over the latch of the needle immediately to the left of the center needle and pull yarn through by hand. Put this needle in rest. Then lay main color across rest of the needles to the left of needles in rest. The reason for the 2 needles in rest is because these stitches have been worked by hand and you do not want them to work a second time when you do the other stitches for this row.

You now have this setup: main color over 13 needles; next needle has been worked with contrast and is in rest; next needle has been worked with second ball of main color and is in rest; remaining needles covered by main color. Now pull down on the balls of yarn so that they hang about 4 inches below stripper. Place the left hand lightly just above the balls and work the row. (Never have the balls pulled out where they hang far down. They will easily twist if you do this. Just leave enough leeway for the number of stitches you want, and you will soon see that, as you knit the row, the balls will be stopped by the left hand and the yarn will easily feed onto the needle.) When you start new balls of color in this way, you DO NOT have to tie your yarn. You fasten in the loose ends when you are all through with the garment, thus eliminating unsightly knots.

Argyles are made in two ways, depending upon the size diamond you want. If you want a small diamond, you move your colors every row; if you want a large diamond, you knit two rows alike, then move colors. We shall make a small diamond first by written instructions.

Row 2: Lay main color across 12 needles at left. Then take hold of contrast from beneath the main color because the two colors must cross so that you will not have a hole at this point. Working from the left, if you will lay the main color with right hand, then with left hand reach under the yarn held by right hand and catch hold of the next color, you automatically make the twist. Now to continue, lay contrast across 3 needles (in the row before contrast was across only 1 needle; therefore, you are moving color one stitch each side). Lay main color from second ball (again bringing this color from underneath contrast) over the 12 needles at right. Work row.

Row 3: Main color over 11, contrast over 5, main color over 11.
Row 4: Main color over 10, contrast over 7, main color over 10.
Row 5: Main color 9, contrast 9, main color 9.
Row 6: Main color 8, contrast 11, main color 8.
Row 7: Main color 7, contrast 13, main color 7.
Row 8: Main color 6, contrast 15, main color 6.
Row 9: Main color 5, contrast 17, main color 5.
Row 10: Main color 4, contrast 19, main color 4.
Row 11: Main color 3, contrast 21, main color 3.
Row 12: Main color 2, contrast 23, main color 2.
Row 13: Main color 1, contrast 25, main color 1.
Row 14: Contrast color 27.

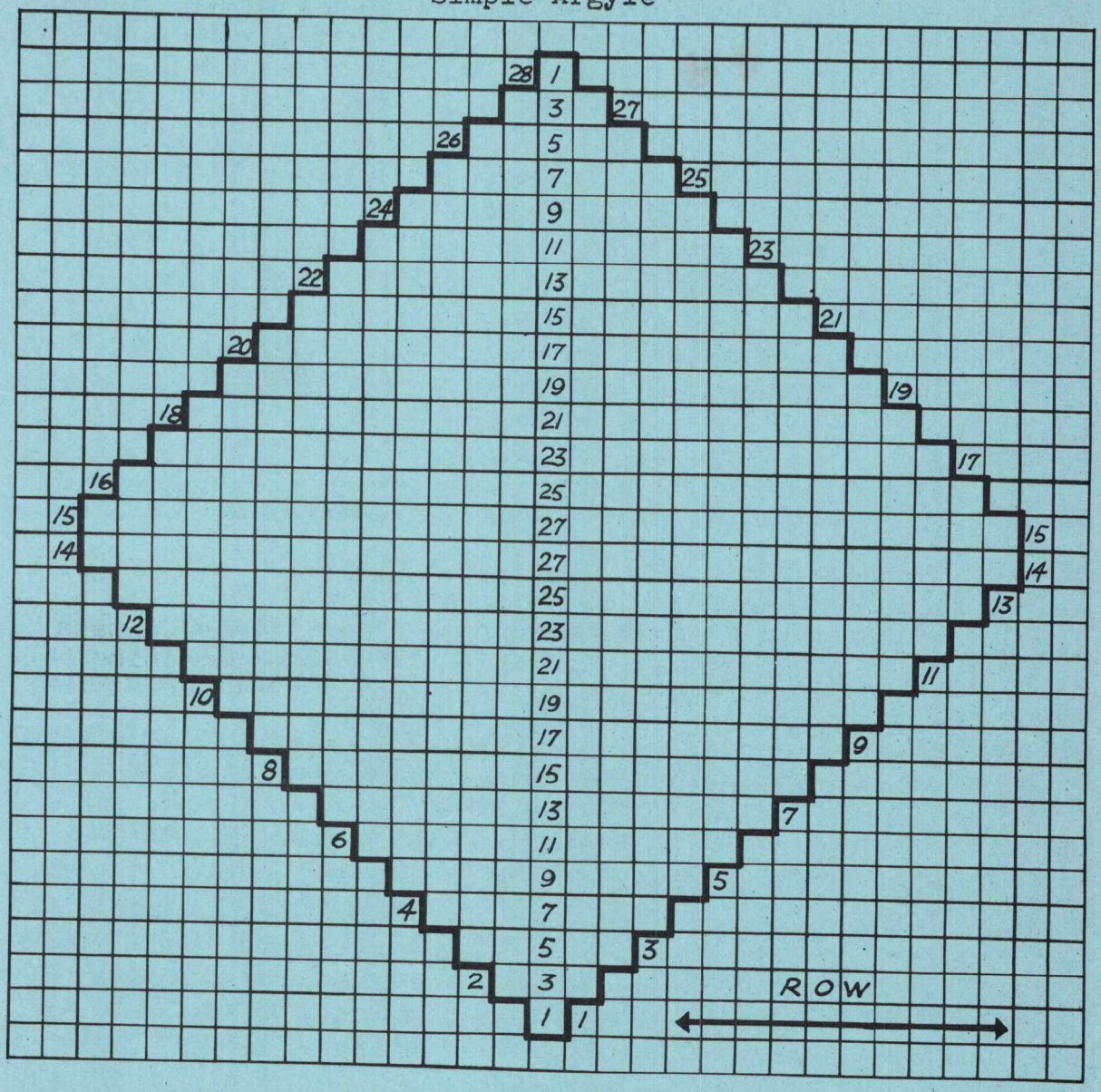
This is the center of your diamond. Do you clearly see what you have been doing? Look back at the directions as written. The number of main color stitches at each side has always been the same although lessened by one stitch each time. The center diamond has had the number of stitches increased by 2 each time (1 stitch from each main color section).

You will now reverse the procedure by starting with row 14 and working back to row 1, thus completing the diamond.

Now try making a large diamond in the same way, except that you will now knit 2 rows of row 1, 2 rows of row 2, etc., till you have done 2 rows of row 13. Now do just 2 rows of row 14 (not 4 rows) and start back with 2 rows of row 13, etc.

Here is the small diamond charted on graph paper. Isn't it much easier to follow on the graph than when written?

Simple Argyle



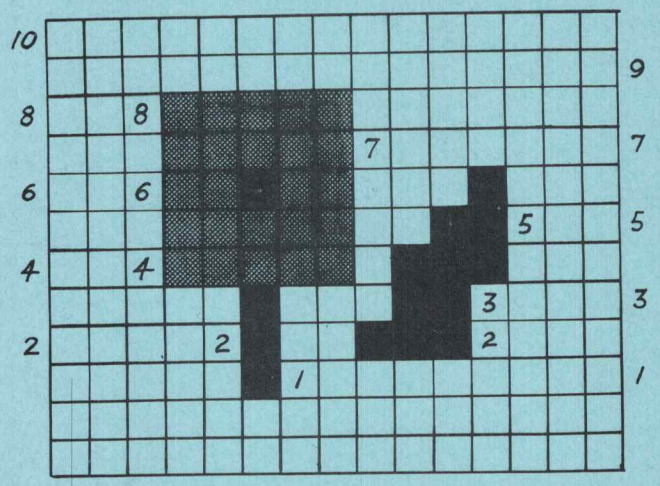
Cast on 27 stitches. Work 2 rows. Set counter on 0.

The numbers at the outside are row numbers. You want them close to the edge of the pattern for easier reading.

The numbers inside the diamond represent the number of contrast stitches in each row.

Now let's take a picture pattern, one that doesn't work in any set way, and see whether you can follow the graph easily. The following chart is enough to get you started on the rows where the colors are attached.

Color your chart lightly with the colors you intend to use. See how easy it is to read a chart done in this way.



Always center pattern.

Pink

Green

Cast on 15 stitches and work 2 rows. Set counter at 0.

Row 1: Lay main color over 9 needles. Take short end of green ball; lay over next needle; pull through by hand and put this needle into rest. Carry same strand of main color under needle in rest and lay across remaining stitches. Work row and push needle in rest back into working position.

Row 2: Main color over 5 needles, under 1, over 2, under 3, over remaining stitches. Lay green over needles skipped.

Row 3: Main color over 4, under 2, over 3, under 1, over remaining stitches. Green over needles skipped.

Row 4: Main color over 3. Lay pink across next needle; pull through by hand; put needle into rest. Then lay pink over next 4 needles. (At this point you need second ball of main color.) Attach it to the next needle; put this needle into rest; pass main color under 3 and over remaining stitches. Lay green across skipped needles.

Continue following chart.

Row 6: For the center of the flower use just a short piece of yarn, working this stitch by hand and putting needle into rest till row has been knit.

Row 7: You are through with green so break off this color, leaving an end of about 3 inches.

Rows 9 and 10: Main color.

When pattern is completed and work bound off, weave in and fasten the ends of yarn.

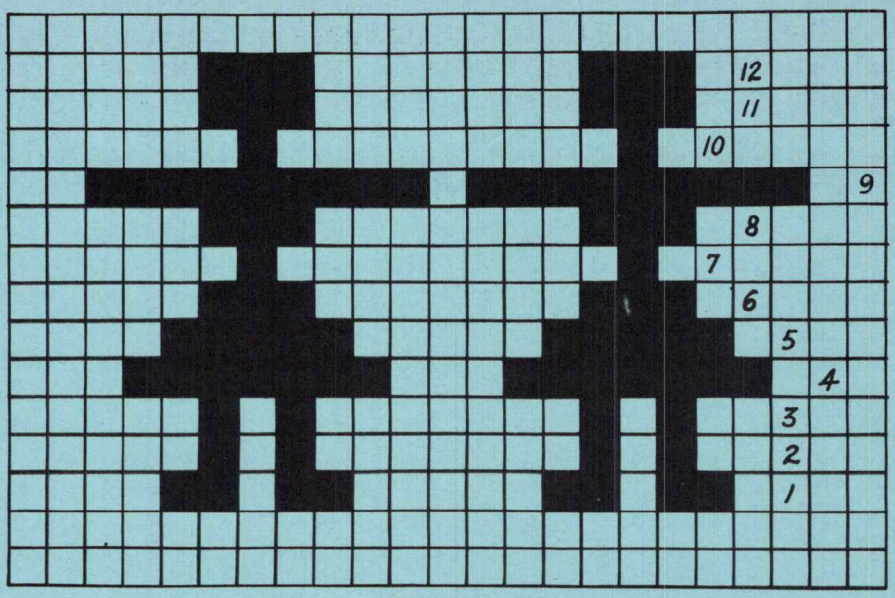
For our last example we shall do a picture pattern with one variation from the previous patterns. Up till now we have been working with small sections of color, using different balls of yarn. You may want to do patterns of many colors, such as floral patterns, where you may have 2 stitches of 1 color divided by 2 or 3 stitches of another color. To do patterns such as this, you still want the separate balls of yarn for each color. Then, working with one color at a time, lay it across all the needles that call for that color, but underneath all the needles that are to be another color. Take the second color and lay it across the needles that are to be of this color, but underneath all the needles already covered by the first color and all the needles that call for a third color. Do the same thing with each separate color. By working in this manner, you always lay the yarn in the same color sequence, and since this automatically crosses the yarn, you avoid holes. It is important to remember that you must always lay colors in the same order.

Following is one example of this kind of work done with 2 colors.

1. Colors laid in sequence

2. Case of 1 color passing under more than 3 needles where it would be impractical to use separate balls of yarn of main color. You will still use 2 balls of blue, however.

Previously we have emphasized the fact that you must never carry yarn under more than 3 needles. However, there is one exception to this rule. You will find patterns that have only one or two rows where yarn would have to be carried under more than 3 needles. In a case like this it would be impractical to use separate balls of yarn because you would have too many loose ends to weave in after pattern is finished. You will see in the chart that follows there are only 3 rows (rows 4, 5 and 9) where the main color is carried under more than 3 needles.



23 STS.

White background

Blue figure

Cast on 23 stitches and work 2 rows.
Attach 1 ball of blue to fifth needle from right. Attach second ball of blue to ninth needle from left. Put these needles into rest.

Row 1: Lay white over 4, under 2, over 1, under 2, over 5, under 2, over 1, under 2, over remaining stitches. Lay blue over 1 more, under 1, over 2. Do the same for the other figure.

Row 2: Lay white over 5, under 1, over 1, under 1, over 7, under 1, over 1, under 1, over remaining stitches. Lay blue over 1, under 1, over 1. Do the same for the other figure.

Continue in this manner.

You should now be able to figure out any kind of multi-colored patterns.

In handknitting, you do the 2 together, yarn over row as you knit across the row. You then purl back, purling the yarn over loops. On Speed-O-Knit, you actually set the pattern first, putting the 2 stitches on needles as pattern specifies. After the pattern is set up, you work one row (representing the knit row). This row actually knits the 2 together that are set that way and at the same time puts the yarn in position over the empty needles to form new stitches. You then work the next row (representing the purl row) and automatically there is a new stitch on the needles that were emptied. So all you have to remember in making eyelets is:

1. First set the pattern
2. Then work 2 rows.

Most lace patterns are done on a 2-row basis such as this. A few are done on just one row, but not too often. Examples of this will follow.

Yarn over, 2 together. Simply remove stitch and place it on needle immediately to the left, thus having the empty needle for the new stitch before the 2 together.

Slip 1, knit 1, pass slipped stitch over. Since this is simply to slant decrease in the opposite direction to a regular 2 together, you have no worries. Speed-O-Knit automatically slants the 2 togethers the way they should go. For instance, when you decrease at the beginning of a row on Speed-O-Knit, at the right, the 2 stitches slant toward the center. Then you work across to the left, decrease at that side, and again the decrease slants toward the center. One of the many wonderful things about your Speed-O-Knit is that it does things like this so neatly and easily.

Slip 1, knit 2 together, pass slipped stitch over. Quite often you will run into patterns like this, or others that have a decrease of only 1 stitch but where the 2 together is separated from the yarn over by several stitches. On Speed-O-Knit when doing things like this, you have to do a bit of maneuvering. Let's take the first item. Since it is actually a decrease of 2 stitches, that means you must put 2 stitches onto a third needle. If your pattern calls for yarn over, slip 1, knit 2 together, pass, yarn over--well and good. The yarn overs come on either side of the decrease. Put one stitch from the right onto the specified needle and a stitch from the left onto the same needle. Now you automatically have the 2 empty needles in position for the yarn overs. If you did this in any other way, you would have 2 adjoining empty needles and 2 needles will not pick up and form an eyelet. Only 1 needle at a time will do this.

If you are working on a pattern that has the 2 together and the yarn over separated by several stitches, first determine which needle is to be the 2 together needle and move the necessary stitch or stitches. Then move the stitches at either side, one at a time, moving toward the pattern needle, to close the space, until you have the correct number of stitches next to the 2 together needle, and the empty needle where the pattern indicates a yarn over. It sounds complicated, but it really isn't. However, let's work with simple patterns for the time being.

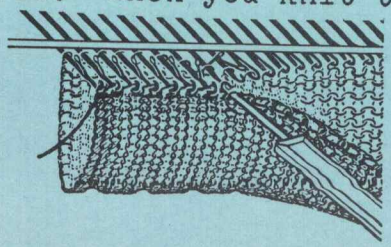
EYELETS

Eyelets are made by 2 together, yarn over, 2 together, yarn over, etc. There is no reason to slant stitches in opposite directions. Eyelets are used for openwork to run a drawstring through, for patterns, for a fold line to give a small scalloped effect; and a single eyelet made by 2 together, yarn over (just the one time) for a small buttonhole for baby clothes, etc.

Let's make some eyelets.

Cast on 30 stitches. Work 6 rows. Make a row of eyelets as follows: In doing eyelets, this is one time you set the pattern from left to right always. If you try both ways, you will see why. It is easier to use the decker from right to left, and when you are making a solid row of simple eyelets, all stitches can go in the same direction. Starting at the left, put the second stitch on the first needle, leaving empty needle in place. Skip one stitch. Put next stitch (actually the fourth from the left) on the needle just skipped, leaving empty needle in place. Continue in this way across the row so that you have 2 stitches on one needle, then an empty needle, etc. NEVER move the last stitch of a row as that would form a decrease. End with either an empty needle and 2 single stitches or an empty needle and 1 single stitch. Be sure stripper is set on No. 4. Work 2 rows, being sure that all stitches work off. Work 6 more plain rows.

We shall now make a hem so that you can see how the eyelets form a fold line and make the scalloped edge. Actually, all you do is hook the cast-on row back onto the needles. You then have 2 stitches on every needle, both stitches back of the latch. When you knit the next row, you have hemmed your work.



Showing cast-on edge being hooked onto needles. It is actually easier to start at the right.

In making a hem, measurements are always taken from the fold line. If you want a 2-inch hem, for instance, you would first work 2 inches, set counter back to 0 and work another 2 inches; then hem. The first 2 inches is the part that turns under. It is not necessary to use free move when making a hem.

After hemming, work some plain rows. Then make another row of eyelets as before, setting pattern first, then working 2 rows.

Work 6 more rows. Now let's do an eyelet pattern that is based on only one row at a time. First set the pattern just as you have been doing. Work 1 row. Now with decker move the actual stitches, one at a time, onto the adjoining needles that have just the strand of yarn over them (not having yet formed a complete stitch). Make sure all stitches are back of latches and work row. This much usually completes the pattern. You would then do some plain knitting before you did another pattern. Note that this has given you a much fancier pattern than the plain eyelets.

If you have the multiple decker (first mentioned in lesson 5), try the following: Set your deckers so that every other one is in working position. Put needles in free move. Using multiple decker in same manner as single decker, remove 10 alternate stitches. (Hook the 10 deckers onto needles, pull toward you so that stitches slide back of latch; then push decker back, thus removing 10 stitches onto the 10 decker needles.) Move decker over one stitch in either direction and replace the 10 stitches. (Hook decker onto needles and raise tool so that stitches slide onto needles.) You have just made 10 eyelets at one time. Experiment with this tool and you will find you can set it for many lace patterns.

Now try the three eyelet patterns given on page 32 of the basic pattern book, "Hand-Knit Fashions for Speed-O-Knit."

Then try pattern 12 on the last page of the blue manual. Try this pattern first exactly as written, using free move when specified. Then try it without using free move. Judge for yourself which is easier. Personally, I do not use free move for an eyelet pattern as I find it easier to leave the needles in working position and then, after transferring the stitch, to pull the needle into rest. When the needles are in free move, you first have to hook the decker to the needle, then pull needle toward you until stitch is back of latch, and then get the stitch on the decker; whereas, when needles are in working position, you can slide stitch onto decker in one motion. Also, by not using free move, I do not have to worry about removing row counter. Always remember in doing anything, to do it the way that is easiest for you.

After you have tried all these patterns, see if you can adapt a handknit pattern to the knitter and figure some patterns out for yourself.

REST POSITION PATTERNS

Before starting patterns, read the following paragraph carefully:

Be sure stripper is set at No. 4. Always work very slowly the row that catches all the loops after needles are put back into working position. Move the lock with a slight jerky motion instead of smoothly. Different yarns work in different ways. With some the loops slide off smoothly, and with others they sometimes catch. The main thing is BE CERTAIN all the loops work off. (If you see that they aren't going to, use your red hook or even your finger to pull the loops off.) If you have a bit of work already knit, you can hold onto the work from underneath and, as you move lock across, pull down on the work especially under the pattern needles. The main reason for making sure all the loops come off is this: if they don't, that one loop will stay there and continue to pull up, thus gathering your work. Then to correct it, you would have to drop this stitch off the needle, run it back down to where it first caught, and pick up the stitch, in pattern. So it is much easier to watch as you work. If you have finished a row and do have double stitches on some of the needles, fix it right away. Catch hold of the loop of yarn closest to you with the red hook. Raise this loop so that you can get the needle latch into position; main stitch is back of latch and latch is open. Take tool away, letting extra loop fall into position on top of the latch and then pull the strand through by hand.

Always set pattern from right to left.

Pattern No. 1. Tension No. 4. Stripper No. 4

Cast on 23 stitches. Work 2 rows. Set counter at 0.
Bring every fourth needle into rest position. (3 needles working between)
Work 3 rows. (Yarn at left)
Push needles that are in rest back into working position, making sure latches are open.
Work 1 row. Be sure all loops work off and that you do not have 2 stitches on any one needle.
Skip the first needle; bring second needle into rest. Counting from this second needle, bring every fourth one into rest. (This is to stagger the pattern.) Note that you still have 3 needles working between those in rest.
Work 3 rows.
Push needles that are in rest back into working position.
Work the row.
Repeat these 8 rows for pattern.

All patterns are worked out so that you can make good use of your counter. Note that in this particular pattern, every time you reach a multiple of 4 you know that you are ready to change to the other setup. Also, you are at the right side of the knitter.

Pattern No. 2.

Cast on 23 stitches, using every other needle. Then work the same pattern that you just did and see how much lacier it is.

Pattern No. 3.

Cast on so that you have * 2 needles working, 1 neutral, 1 working, 1 neutral; repeat from * 4 times; then bring 2 more into working position. In other words, always start and end with the same number of needles.

Work 2 rows. Set counter at 0. (Always work a couple of rows before starting pattern work.)
Bring the single needles from working position into rest. (These are the needles that are between the groups of 2 needles.)
Work 3 rows.
Push needles that are in rest back into working position.
Work 1 row, making sure all loops work off.
Bring the single ones into rest again and work 3 rows.
Push needles back into working position and work 1 row.

Experiment with some variations of this. For example, you can have more stitches in the groups that are divided by the single needles, or you can have more needles in neutral. Watch to see how pattern is formed. When a needle is in rest position, as you work the other stitches, notice that the yarn lies across the needles in rest. For the above patterns, after you have worked 3 rows, you will have on the needles in rest the original stitch and 3 strands of yarn (representing the 3 rows just done). Then when you put the needles back into work-position, notice that the original stitch and the 3 strands of yarn are all in back of the latch. You lay the yarn across and as the next row knits, the new strand of yarn is pulled under all loops and through the stitch. Suppose you should drop a stitch from one of these single needles. If you know how the pattern is formed, it makes picking up a dropped stitch quite simple. Instead of pulling each single strand of yarn through the dropped stitch as you did in solid knitting, you insert hook through the dropped stitch, bring latch up so that it goes between the third and fourth strands of yarn, latch below the strand, hook catching the strand, and pull the fourth strand through just as it was working before it dropped.

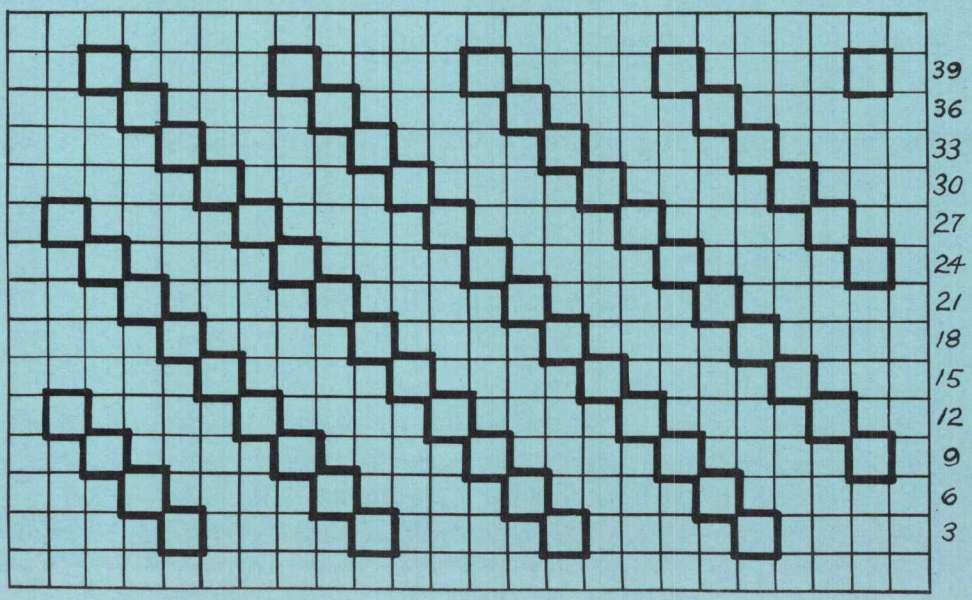
If you will watch all patterns to see how they are formed, you not only will be able to do any repairing easily but also will think of many variations to do.

Pattern No. 4.

Cast on 24 stitches, every needle. Work 2 rows and set counter on 0.
Bring every fifth needle into rest position.
Work 3 rows.
Push needles that are in rest back into working position BUT DO NOT KNIT the next row yet.
Bring into rest each needle that is immediately to the left of the needles that were just in rest. (The needles that have 4 strands of yarn are the ones that were in rest.)
Work 3 rows and put these needles back into working position.
Bring the next needles to the left into rest. Work 3 rows and put these needles back into working position.
Continue in this way--and, again, concentrate on your pattern. The stitches for the pattern are formed as before, but you are working on a diagonal pattern. Therefore, because you are moving the pattern needle over one each time, you will soon find you have a big gap of plain knitting at one end. Your pattern has 4 needles between each pattern needle. Even though you are moving your pattern in a diagonal line, notice that you always have 4 needles between those in rest.

Never put the end needles into rest unless the pattern particularly states. As soon as you have moved pattern so that you have 6 needles in working position at the right, obviously you can start a new pattern here. To do this, leave the first needle working, bring the second into rest, and continue across the row the same as before.

It is a very good idea, in working on patterns such as this, to get graph paper and mark the line of your pattern stitch letting each square represent 3 rows. Then you can easily see just when it is time to start a new pattern needle at the right.



After working 3 rows, reset pattern, moving 1 stitch to the left. This leaves 5 needles working at the right, rather than 4, as you have between needles. The end needle is never used in a pattern such as this. Work 3 more rows and reset pattern. You now have 6 needles working at right. This enables you to start a new pattern stripe, 1 needle in from the edge and 4 needles still working between stripes. Study diagram and note when each new diagonal is started.

After you have mastered this, start bringing pattern needle back to the right, working 3 rows as before. When changing, bring needles up that are immediately to the right of the ones that were just in rest. As soon as you have room, start new patterns at the left end.

This is another pattern that can be varied in many ways. You can have more needles working between pattern needles; you can have more working and have your pattern needles 1 in rest, 1 working, 1 in rest. You can work herringbone patterns, first by zigging to the right for so many rows, then to the left for the same number, back to the right, etc.

* * * *

Try out some of your own ideas using rest position. For instance, try using more than 3 rows while needles are out. In fact, do anything that comes to your mind. You may come up with some very fascinating new patterns.

SKIPPED NEEDLE WORK

Set needles so that you have 2 in working position, 1 in neutral, repeating this until you have 16 needles in working position. Now bring the 16 needles into rest and cast on as usual. When you come to the space where a needle is in neutral, just act as though there were no space, carrying yarn over to next needle. Put needles into working position and knit just as though you were working on all the needles. This is called a "Mock Rib." It looks like ribbing, but has no elasticity.

Make another swatch, this time casting on so that you have 3 needles working and 5 needles in neutral, repeating until you have 18 needles working. This produces a lacey effect that is used a great deal with novelty yarns, such as organdy ribbon and straw.

Make a swatch having 1 needle working, 5 needles in neutral, 2 working, 5 in neutral and 1 working. Work at least 30 rows. This is an imitation hairpin lace. If you want to interweave strips together, only bind off the 2 center stitches, leaving the 2 end stitches open. Then the end stitch will easily pull out into loops as you need them.

Make a swatch having 2 needles working, 20 in neutral and 2 working. Knit at least 30 rows and bind off. Fold so that the two edges are together and you have a good fringe that can be cut or left in loops. You can make it as wide as you wish, yet still be certain it is even.

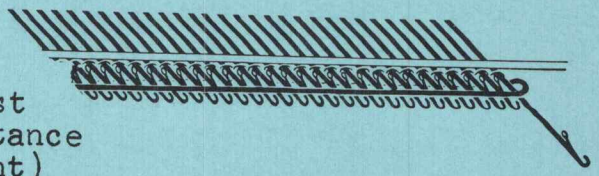
Now try to think of some other ideas for using skipped needles.

TURNING HEELS

In handknitting this type of heel is called a "Dutch Heel." It is not the same as a knit 1, slip 1 heel that you would find in handknitting instructions.

Cast on 30 stitches and knit four rows. Yarn and lock at right.

1. Knit to the left.
2. Bring last needle worked at left into rest position.
3. Lay yarn across all needles, including the one in rest, and work to right.
4. Bring last needle worked at right into rest position.



Row has been worked and last needle worked (in this instance the one at the extreme right) and put into rest. Yarn is over this needle and in position to be worked to left.

5. Lay yarn across all needles, including those in rest, and work to left.
6. Bring last needle worked at left into rest position. (You now have two needles in rest at this side.) Your yarn is attached to the last needle just put in rest and is lying over the outer needle. This is the correct position for the yarn.
7. Lay the yarn across the needles and notice that it goes over the needle to which it is attached, but does not go over the outer needle. Work to right.
8. Bring last needle worked at right into rest position. (Two needles in rest at this side.) And yarn is in same position as at the other side, so that again it lies across the needle just put in rest, but not over the outer one.
9. Work the row.

Stop for a minute and look at the needles that are in rest position. Note that each needle in rest has two stitches. This is correct. One is the original stitch; the other is the loop of yarn that prevents a hole.

10. Continue as above, bringing the last needle of every row worked into rest position, making sure the yarn lies across just this one needle of those that are in rest when you do the next row. Do this until you have only the 12 center needles still in working position. (Nine needles in rest at each side.)

You have now reached the halfway point in turning a heel. Look at your work, and you will see that you have been working from the outside edge in towards the center. To complete the turn, you now have to work from the center out.

1. Let yarn hang straight down between the needle to which it is attached and the closest needle that is in rest.

2. Bring yarn up between the first two needles in rest (the two immediately next to those still working).

3. Holding yarn out to the side, push first needle that is in rest position back into working position, making sure latch is open.

4. Lay yarn across.

The reason for holding the yarn out to the side is this: You are now going to put the needles that are in rest back into working position. As you do this, you must be sure the latch is open and that when you knit, the yarn will lie over this needle. If you bring the yarn up between the two needles while they are still in rest position, you will find it much easier. (Try putting the needle into working position first, then bringing the yarn into place to lie over this and the other needles, and you will see what I mean.) Also, if you lay the yarn across the needles BEFORE putting the needle back into working position, the yarn will cause the latch to shut. Then, when you work the row, you would lose this stitch.

5. Work the row. Let the yarn hang as before between the needle to which it is attached and the closest one in rest.

6. Bring yarn up between the two closest needles in rest; hold yarn to side, and put inner needle back into working position, latch open.

7. Lay yarn across and work the row.

8. Continue in this way, putting one more needle from rest back into working position, making sure yarn goes across each added needle, until all needles are again in working position.

Heel is now completely turned. You may wish to knit a few more rows and bind off so you can keep this sample for future reference.

POCKETS

Cast on 40 stitches and work 40 rows. Lock and yarn at right.

1. Counting from right, leave 30 needles in working position; put 10 needles at left in rest.

2. Work across.

   THIS IS ONE OF THE EXCEPTIONS TO THE RULE OF YARN GOING AROUND NEEDLES IN REST. DO NOT LOOP YARN AT EITHER SIDE OF POCKET.

3. Bring 10 needles at right into rest. You now have 10 in rest at each side, and the center 20 in working position.

4. Cover the end stitches of the 20 center stitches with feather combs.

5. Work back and forth on these 20 needles for 40 rows. (On an actual pocket, you would work twice the depth pocket is to be.) End with yarn and lock at right.

6. Put the 10 needles at left back into working position and work to left.

7. Put the 10 needles at right back into working position and work to right.

8. Work a few more rows and bind off.

Pull the extra rows at center through to the purled side. Seam the sides together by hand, and there is your pocket.

HORIZONTAL DARTS

Cast on 30 stitches and work 20 rows. Lock and yarn at right.

1. Remove counter. (These are extra rows you will not want to count.)

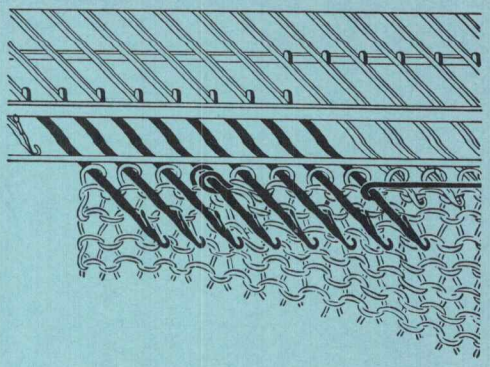
2. Put four needles at left into rest.

3. Work across.

4. Bring yarn down between last needle worked and first needle in rest, then up between the first two in rest (those closest) and lay yarn back across needles. (This is what is meant by looping yarn around the closest needle in rest.)

5. Work back to right.

6. Bring four more needles at left into rest.



This shows how yarn is looped around needles in rest. Note that the fourth needle from left has two loops of yarn and the yarn at this step is being looped around the last needle in rest. This means that four needles were first put into rest, row worked, yarn looped, worked back; four more needles put into rest, row worked, yarn looped and now in place to be worked back.

7. Work to left; loop yarn; work back to right.

8. Continue bringing four additional needles into rest position every other row until you have a total of 20 needles in rest at the left. Yarn and lock are at the right.

9. Replace row counter.

10. Put needles that are in rest back in working position, making sure latches are open.

11. Work this row and some additional rows.

12. Bind off.

Notice that one side of your work is longer than the other. This is because you have knit more rows on the right edge, while you were keeping the stitches at the left from working (by putting them in rest). Darts such as this are usually used to obtain extra bust fullness in blouses. Horizontal darts can be made at either side (for cardigans) or both sides at once (for slipovers).

CIRCULAR PIECES

Cast on 20 stitches.

1. Work one row and bring last needle worked into rest (at left).

2. Lay yarn over all needles. Work back to right.

3. Work to left. Bring last needle worked into rest. (Note that in making dart above, you had to loop yarn around a needle. This is because you were putting needles in rest opposite the yarn. Here, as in the heel of a sock, yarn is right in position after you work the row and is attached

to the needle to be put into rest. When you bring the needle into rest, the yarn automatically lies over this needle.

4. Work back to right.

5. Work to left. Put another needle into rest and work back to the right.

6. Continue in this way, putting one needle at a time into rest at the left till you have only one needle at the right working.

7. Put all needles back into working position, making sure latches are open.

This is one gore, or section, of a circle. Repeat from Step 1 above. I would suggest you make several gores for practice and also to see what you are getting. If you wish, go ahead and make enough gores to complete a full circle. Bind off and save. A piece such as this is excellent for the back of a baby bonnet.

This is also the principle used in making circular skirts.

From now on directions will not refer to position of yarn. Just remember always to have the yarn go around or across the needle as it is put in rest or loop the yarn if it is not already attached to the needle put in rest.

ZIG ZAG

Cast on six stitches.

1. Work to left, last needle into rest.

2. Work to right. Repeat these two rows till you have only one needle at right still working.

3. Work the one stitch. Then the closest needle in rest goes back into working position, and you work back to the right. Continue in this way, putting one more needle back into working position until all needles are back in position and you have knit this one row with all needles working. Yarn and lock are now at right.

4. Put last needle just worked (at right) into rest.

5. Work to left.

6. Repeat these two rows as you did before, putting one more needle into rest at right each time. Then reverse by putting one more needle back into working position each time.

7. As soon as you work one row on all stitches, you are ready to change sides, alternating between starting first at left, then at right, in putting needles into rest.

This is a nice trim as you can make it any width you wish, and it gives the appearance of ric rac. It can also be used in wide strips for afghans.

MITERING

Cast on 10 stitches and work 20 rows. Lock and yarn at right. Miter corner as follows:

1. Work to left, last needle into rest.
2. Work back to right.
3. Repeat these two rows until all needles are in rest but one at right.
4. Reverse (as you did above) putting one needle at a time back into working position, until all needles are again working.
5. Work 20 rows and bind off.

Do some experimenting with short rows on your own. You can really have a lot of fun, and you will be surprised at some of the shapes you can make.

In working these short rows, don't forget to use your Plasti-Guide (first mentioned in Lesson 3). You will find it very valuable in getting your needles back in exact working position, thus saving you from dropping stitches, especially at the short row divisions.

TENSION

Up until now you have been working only with tension No. 4. Now it's time to find out just what tension is and what it is used for in knitting. Tension of yarn determines the size stitch you will have and is the MOST IMPORTANT item in learning to make knits. All knitting, whether it is by hand or Speed-O-Knit, is based on gauge--so many stitches equal one inch in width and so many rows equal one inch in length. In handknitting, to obtain different size stitches, you change the size of your needles. On Speed-O-Knit you simply change the number of your tension dial.

One thing you must always remember: the numbers on the tension dial DO NOT correspond to the sizes of handknitting needles. Therefore, if you are using a pattern from a handknitting book, the size of the needles will be of no help to you. Rather, it is the gauge as given in the pattern that you must duplicate. One pretty good rule is that you can set the tension two numbers higher than the size handknitting needles specified and usually come pretty close to the gauge you want. However, this is not a foolproof method. It just gives you an idea of what tension to try first, thus eliminating a lot of experimenting. No matter what you make or what yarn you use, always knit a sample swatch first, trying several different tension settings until you get either the gauge specified or the gauge you want. Avoid using too tight a tension. Knitting should be soft, and if your work is too tight, the garment will be very harsh. Never try to determine gauge while work is on the knitter. Always remove swatch before measuring.

Cast on 30 stitches and work 10 rows at tension No. 1. This is the tightest, and you may not even be able to use it with your yarn. But try anyway. Then change to No. 2 and work 10 rows; change to No. 3 and work 10 rows, etc. As you get up to Nos. 7 and 8, you may find the lock is hard to push. That is because, in order to make a larger stitch, the needle butt travels a greater length down the side of the tension cam, thus making more pull on the yarn than for a tighter stitch. Bind off the piece you have just made.

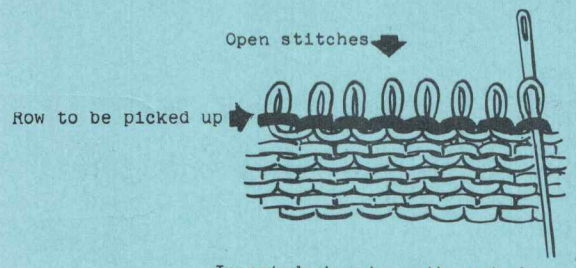
Since you would soon wear out if you continually had to exert so much pull on the lock, here is another way to get a looser gauge. Cast on 30 stitches but use only every other needle, bringing every other one into rest until 30 are up. Work the same as before: 10 rows at tension No. 1, 10 rows at No. 2, etc., binding off after you have done 10 rows at No. 8. Now take hold of work at both narrow ends and give a quick jerk. Your work immediately becomes solid rather than having the appearance of being ribbed. Check this piece against the first piece and note the difference.

Make a third swatch, but this time use every third needle, leaving two in neutral between every one you cast on, until you have cast on 30 stitches. Use your tensions as before; bind off; pull into solid work and compare with the other two.

Now this should give you some idea of the wide variety of gauge you can obtain on Speed-O-Knit. And you have only been working with the whole numbers on the tension dial. The halves are also marked.

2. Put empty needles into working position and open latches.

3. Hold purl side of work facing you. The top of your work looks like this.



Insert decker beneath marked stitch so that decker point is actually through both the marked stitch and the open stitch.

You are going to use your decker needle to replace the stitches. If you try to insert the decker through the open stitches, you will find that, as you progress, the following stitches will tighten up so that you can hardly see them or pull out entirely. Also, you are likely to pull one stitch too much, and this will unravel several following ones.

Therefore, DO NOT try to replace the open stitches. You actually are going to replace the stitches from the row below. (Don't unravel the yarn as you replace the stitches. Wait until all stitches are back on the needles.)

Continue as follows, working from right to left. Hold work, purl side facing you, close to and on a level with the needles. Also, hold the work with your fingers as close to the row you intend to replace as possible, as this helps keep stitches from running.

4. Insert decker through first stitch at right (as shown in diagram), hook eye of decker into hook of needle, and raise decker handle, sliding stitch onto needle. Pull needle out into rest position.

5. Replace one stitch at a time until all stitches are back on needles.

6. Pull yarn so that the upper row unravels (row of open stitches) Some stitches will already have pulled out. You want the yarn back at the end of your work.

7. Put lock on side where yarn is hanging.

8. Put needles back into working position and you are ready to continue.

If you were working on a garment, you would remove the row counter until you had reworked as many rows as were taken out.

Now let's see how simple this is to do if your stitches are held with a contrast. (Of course, if your work falls off through your own carelessness, as it will, it is a little too late then to think of contrast yarn!) This is the method to use when you fully intend to remove the work from the needles:

1. Remove counter. (You don't want these rows to register.)
2. Work four rows with contrast.
3. Remove work.
4. Put empty needles into working position.
5. Hold purl side facing you.
6. Turn the four rows of contrast back right at the point where you changed colors, and note that the main color stitches stand out clearly, being separated from the rest of the work by the contrast color.
7. Insert decker through these main color stitches, one at a time, and replace them on needles as before, pulling needles into rest position at the same time.
8. Take hold of the end of the contrast and simply pull it out.
9. Be sure lock is at same side as yarn.
10. Put needles into working position.
11. Replace counter and you are ready to continue.

Following are the things you will be doing with contrast yarn, as listed at the beginning of this lesson.

HOLDING STITCHES TO BE RIBBED LATER

Since this is practice work and it tends to become tedious, only cast on 20 stitches.

1. Cast on with a contrast color.
2. Work four rows. Break contrast. Lock at right.
3. Set counter on 0
4. Work 20 rows with main color.
5. Bind off all stitches.

6. Turn work so that purl side faces you and contrast color is at top.

7. Turn contrast back and replace main color stitches on needles.

8. DO NOT REMOVE the contrast color.

9. Put needles into working position and work nine rows with main color. (This is to be your ribbed band.)

10. Work one row, using free move.

11. Change the last 10 rows into ribbing of knit 2, purl 2. Skip first two stitches. Drop third stitch down to the main color stitch that is still held by contrast. Rib back up. Do this several times (enough to get the idea, but if you wish, don't take the time to do the whole piece).

See how much easier it is to do the ribbing last? There are several reasons why I prefer to do the ribbing in this way.

1. It is easier to drop down to a definite stitch than to drop to a cast-on row and have to manufacture a stitch by twisting the tool.

2. You have more work to hold onto and this makes it easier to operate the green tool.

3. The bound-off edge of ribbing looks much better than the cast-on row.

After ribbing is finished, carefully cut the contrast at each side on row next to main color. Then pull this row of contrast out and it all comes off.

TAKING PART OF WORK OFF TO BE WORKED LATER

1. Cast on 20 stitches with main color.

2. Knit 20 rows. Yarn and lock are at right.

3. Lay main color across first 10 stitches, contrast across last 10 stitches.

4. Work this row.

5. Remove counter.

6. Put the 10 needles that have main color stitches (the ones at right) into rest position.

7. Work three more rows of contrast on remaining needles.
8. Remove these 10 stitches by moving lock across without yarn.
9. Put the 10 empty needles in neutral.
10. Lock on same side as main color yarn.
11. Put needles into working position. Replace row counter.
12. Work 5 rows.
13. Bind off all stitches

    You can now use these same 10 needles if you wish.

14. Replace the 10 stitches that are held by the contrast.
15. Pull out contrast.
16. Start with lock and yarn at right because this is where you first started the contrast and stopped using the main color--in the center of the row.
17. Work six rows and bind off.

INCREASING AND DECREASING ACROSS THE ROW

You are about to do both of these at once. You will seldom run into directions that call for both an increase and decrease across the same row, but since you do have to remove work to do both these things, we shall do it at the same time so that you will be able to do either.

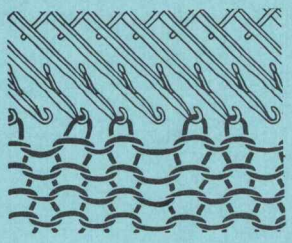
1. Cast on 40 stitches with main color.
2. Work 20 rows.
3. Remove counter.
4. Work four rows with contrast.
5. Remove work. Put needles into working position.
6. Hold work as before to replace, purl side facing, contrast turned back.
7. Replace the first two stitches on the first two needles. Put two stitches on the next needle. Replace two more single stitches on the next two needles. Then put two stitches on the next needle. Repeat a couple of times. (This is how you decrease.)

Now replace a couple of single stitches. Then skip one needle, but DO NOT skip a stitch. Replace a couple more single stitches. Then skip another needle and continue till all stitches are back on the needles.

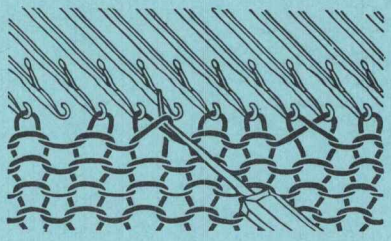
8. Remove contrast.

Your decreases will form automatically when you knit the next row, but you have to make new stitches for your increases.

Here is an excellent diagram to show exactly which strand of yarn is placed on the empty needle to form the new stitch. It is very important that you get the correct strand of yarn, or else you will have a hole at this point.



Showing empty needles before increase.



Notice that the strand of yarn you want is <u>not</u> the strand between two stitches. Actually, it is the stitch from the row below.

9. Make a new stitch on every empty needle.

10. Be sure lock is on same side as yarn.

11. Put needles into working position.

12. Replace counter and continue.

You can use this same piece for the next example, so work a few rows and end at the right side.

TURNING WORK

In two-needle handknitting, to obtain a pattern of alternating knit and purl panels, you change your stitch from knit to purl, or purl to knit, as you come to each panel. The same result is accomplished on Speed-O-Knit by turning your work. Following are the steps for turning work:

1. Remove counter.
2. Work four rows of contrast.
3. Remove work.
4. Hold work with knit side facing you.

   Turn the contrast rows back as you have been doing. Do you notice that, with the knit side towards you, when you do this, the main color stitches do not show up as they previously have? So when turning work, hold the knit side facing you, but turn the four rows of contrast towards you. Now, again, the main color stitches stand out clearly.

5. With knit side facing you, replace stitches on needles.
6. Pull out contrast yarn.
7. Put lock on same side as yarn.
8. Put needles into working position.
9. Replace counter and work six rows.
10. Now remove work as before, and again turn so that the knit side of the last six rows faces you. Replace stitches and work six more rows.

You now have groups of rows first with the knit on one side, then on the other.

HOLDING STITCHES THAT ARE TO BE JOINED

1. Knit a piece with 20 stitches and 20 rows with the main color.
2. Work four rows of contrast and remove work.
3. Make a second piece exactly the same and remove.

4. Take one piece, holding knit side facing you, and replace on needles.

5. Pull out the contrast.

6. Hold other piece with the purl side facing you and replace on the same needles.

7. Pull out contrast.

8. With both stitches back of latches and needles in working position, bind off stitches together as follows:

   a. Lay yarn across first needle and pull through, knitting these two stitches together.

   b. Move this stitch onto second needle (three stitches now on this needle) and pull yarn through all three stitches.

   Continue in this way across the row.

In case you are thinking it would not be necessary to remove the last piece, remember this: In seaming, you must have the right sides together so that the seam will be on the wrong side.

* * *

You may be interested in two optional tools available through The Institute which are very helpful when increasing and decreasing.

The first is the long decker, a single decker, 5½ inches long. To use it, simply remove the stitches one at a time from the knitter, starting at the end and working up to the point where you want to make the increase or decrease. Then replace stitches as desired. This prevents the stretching of yarn between stitches that would occur if you were to move one stitch at a time. This tool is also excellent when making a fast decrease, such as three together across the row. Starting at the end, remove the stitches up to the center of the row. Then replace in proper position. Repeat on the opposite side.

The second tool is the multiple decker, which consists of 20 movable deckers. It can be set to move any number of stitches up to 20 in one move. Thus, if you were making a vertical dart 40 stitches in from the edge, you would move 20 stitches twice. We will give you more uses for this multiple decker in a later lesson on pattern work.

* * *

Included with this lesson is your basic pattern book called, "Hand-Knit Fashions for Speed-O-Knit." We think you will enjoy glancing through it now; but don't try too many new things. Review the steps that you have already learned in these first five lessons and study the "trouble" section on page 9. You have probably run into some of the troubles covered in this section.

You have now increased two stitches, one at each side. In future directions this will be referred to as increasing at the beginning of every row. In handknitting directions, this is the equivalent of increasing both sides every other row, because in handknitting you generally increase in the first and last stitches on the knit rows and then purl back without increasing. But it all adds up to an increase of two stitches. Continue increasing at the beginning of every row until you have a total of 40 stitches.

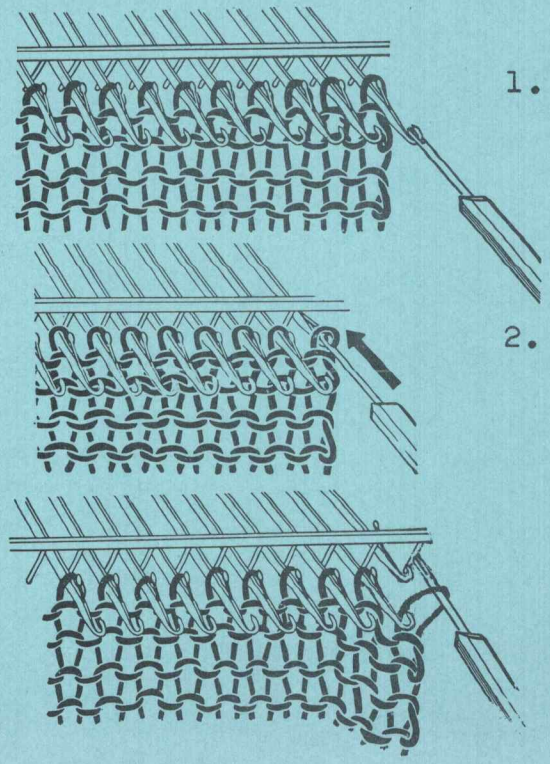
DECREASING ONE STITCH AT A TIME

A decrease in knitting means knitting two stitches together, thus making one stitch where before you had two stitches. Incidentally, a decrease always means eliminating only one stitch. More than one stitch is referred to as binding off.

On Speed-O-Knit you can decrease using one of two methods, either by using a decker tool or manually. I prefer doing it manually, but please try both methods and then use the one that is the easier for you.

USING THE DECKER

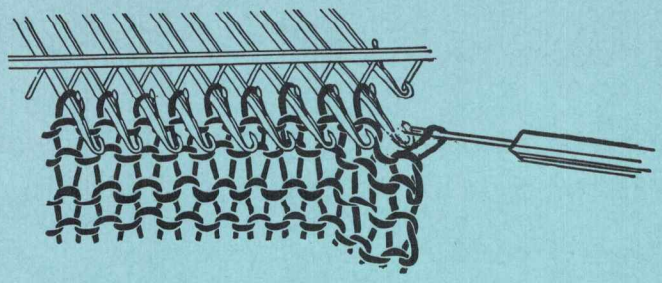
You can use the decker of either the blue or the green tool. Start with yarn at the right.



1. Hook eye of decker onto hook of first needle. Then take hold of work with left hand and hold it firmly in place as you work with the tool.

2. Holding tool in an exact line with the needle, as if it were an extension of the needle, push tool away from you (towards neutral position)

until the stitch slips from the needle onto the decker.



3. Now just twist your wrist, still holding work firmly in place, and bend decker-eye to the left, hooking the eye of the decker into the hook of next needle.

4. Bring tool back in a straight line with the needle and, using the handle of the tool as a lever, raise handle so that stitch slides from decker onto needle.

5. While decker is still hooked to needle, pull needle toward you until stitch is back of latch.

6. Remove decker and, making sure latch is open, push needle back into working position.

You now have two stitches on the second needle, both back of the latch. Push the needle you have just emptied into neutral.

7. Work the row, and the two stitches on the needle automatically become one.

Repeat the process at the left.

In later directions this will be referred to as decreasing at the beginning of every row. In handknitting this is the equivalent of decreasing both sides of every knit row, or every other row.

Continue decreasing this way, using the decker tool, a few times more. Then try the other method.

Starting with yarn at the right:

1. Pull down on the edge of work right under first needle. Since the yarn is hanging at this point, the stitch will pull out into a large loose loop.

2. Catch hold of the stitch with your fingers and slide empty needle out and into neutral position.

3. Put the stitch on next needle back of latch and put needle in working position.

4. Tighten yarn so that stitch is same size as the one already on needle.

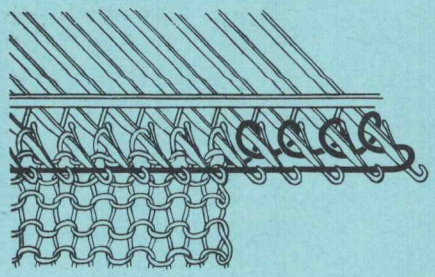
5. Work the row.

Continue decreasing, using either method, until you have only two two stitches left.

INCREASING MORE THAN ONE STITCH

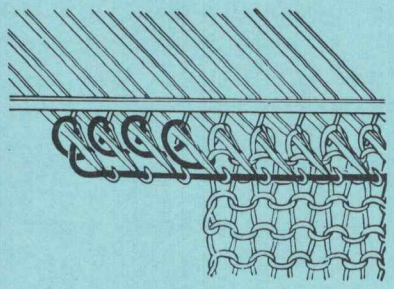
When directions call for an increase such as this, it is referred to as a cast-on. Directions will specify the exact number of stitches and will read: "Cast on_____stitches at the beginning of the next_____rows." We shall work with four stitches.

Starting with yarn at the right:



1. Bring out the next four empty needles, from neutral into rest position. Then cast on exactly as you always do, working from the inner needle to the outer one.

2. Making sure latches are open, put needles into working position and knit the row.



3. Bring the next four empty needles at left from neutral into rest position and wrap yarn in the opposite direction, again working from the inner needle to the outer one.

4. Be sure latches are open and put needles into working position.

5. Knit the row.

Continue casting on four stitches at the beginning of every row until you have 42 stitches. Work four rows without increasing.

DECREASING MORE THAN ONE STITCH

A decrease of more than one stitch is never referred to as a decrease. It is called binding off, even if it is only two stitches. For binding off, you can use either the decker or your fingers, as you prefer. We shall use a four-stitch bind-off as our example.

Starting with yarn at the right:

1. Put first stitch on second needle, putting the empty needle into neutral position.

2. Both stitches back of the latch.

3. Lay yarn across just the one needle having the two stitches.

4. Use thimble over needle butt of this needle, and pull yarn through the two stitches by pushing needle toward neutral position until the yarn is pulled through both stitches, then bringing the needle back toward you till stitch is back of latch and needle is in working position. You now have only one stitch on this needle.

5. Put this stitch onto the next needle, back of the latch, pull yarn through the two stitches.

   Continue in this way until you have actually emptied four needles, ending with two stitches on what is now your first needle.

6. Having bound off four stitches, now work the row, and the first needle that had two stitches now has only one as the stitches work together when you knit the row. (The reason for ending the bind-off this way is to avoid a separation between the bound-off stitches and the rest of the row. When you bind off all the stitches to finish off your work, you naturally don't have this extra stitch to ponder about.)

   IMPORTANT: Most people in learning to bind off make the same mistake. They put the first stitch on the second needle and then, invariably, pull one stitch through the other. You must remember always that it is the yarn that must be pulled through the two stitches.

If you do this correctly, your yarn is always in the right position for continuing. For example, in shaping an armhole, you bind off a certain number of stitches and then work the rest of the row. If you should pull one stitch through another, you would find that, when you are ready to continue, your yarn would be back at the beginning of the row and the bind-off would be puckered.

In binding off, always empty the exact number of needles that directions say to bind off. After binding off last stitch, you will have one loop left. Put this loop on the next needle back of latch to be worked off automatically when row is worked.

Hawaiian Butterfly -

W.S. 1 R.S.

III·I·III·I·III·I·III work 10 rows with 1st + alternate in rest / single needles just worked thru put back in working position, + bring out single that are in working position to rest + work 10 rows repeat pattern

In order to make ribbing on your Speed-O-Knit, it is necessary first to work stockinette stitch, then change certain purl stitches that are facing you so that you have knit stitches facing you.

We shall now try our hand at ribbing. Again, step by step.

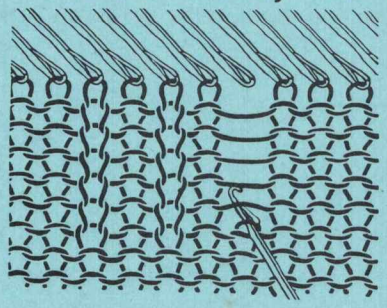
RIBBING

1. Cast on practice stitches and work 40 rows.

2. Work another row, putting needles in free move position.

3. At the center, drop one stitch off the needle as follows: Take your blue tool. Note that one end is a decker, and the other, a thimble that fits exactly over the needle butt. Place thimble over butt of needle; bring needle forward until stitch is back of latch; then push needle back into neutral position.

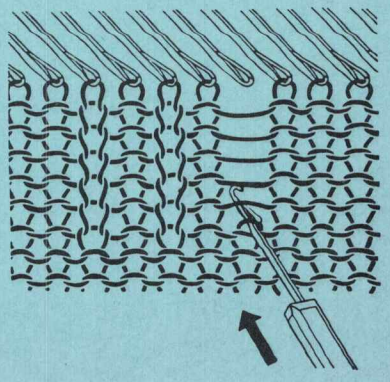
4. Pull down on work where stitch is off the needle and let stitch run, just like the run in a stocking. Let the stitch drop quite a few rows, but not clear to the bottom.



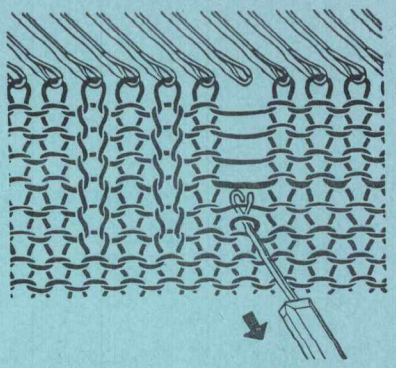
You will now notice that, when you pull down on your work, you have a row of strands of yarn where the stitch has dropped. Each strand represents one row.

5. The following diagrams show how the green tool is used. Note that the latch tool must be used in exactly the same way that your needles work; in other words, the stitch must be in back of the latch and the strand of yarn must be where the yarn lies before being worked.

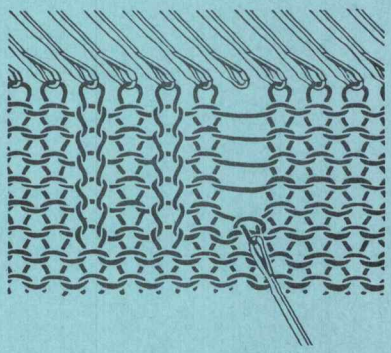
6. Insert rounded end of green tool in the dropped stitch. (Never try to catch the stitch with the hook of the green latch. It is even easier to insert latch tool a few rows under the dropped stitch and then pull work so stitch drops to where you already have it caught.)



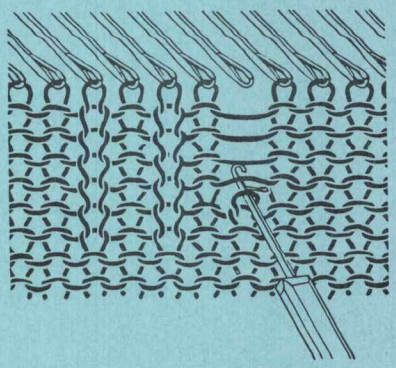
7. Now catch the first strand of yarn so that it lies in position on top of the latch.



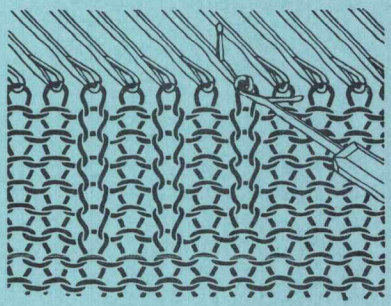
8. Pull strand of yarn through the stitch and



immediately push latch tool under the next strand of yarn, thus opening the latch and at the same time putting both stitch and yarn in position for next stitch.



9. Continue in this way till you are back to the top of your work. Push tool so that stitch is back of latch. Then hook latch tool around empty needle, and using tool as a lever, slide stitch onto needle. You have now ribbed one stitch.



Practice this very slowly at first, watching carefully to see how the tool works. ALWAYS hold work down tightly. This separates the strands of yarn and makes the ribbing much easier. Gradually develop your speed.

REMEMBER THE TWO MOST IMPORTANT THINGS:

a. Always put needles in free move before ribbing.

b. Always hold down tightly on work when using latch tool.

When you have become fairly adept, try dropping a stitch clear to the cast-on row. You will see that you have no stitch to pick up. To make a stitch, catch bottom strand of yarn in latch and twist green tool completely around to form a loop, pushing this loop back of the latch.

Practice ribbing until you can do the following ribs:

Knit 2, Purl 2. Always cast on a multiple of 4 stitches plus 2.

(If you wish, you can try doing this with your yellow tool, as you will see it has two latch needles. However, I strongly advise that you use the green tool for some time before you attempt to do two stitches at once.)

Skip the first two needles; drop the third stitch back to the cast-on row; and rib to top. Drop the fourth stitch back to the cast-on row and rib to top. Skip the next two needles and continue ribbing one stitch at a time.

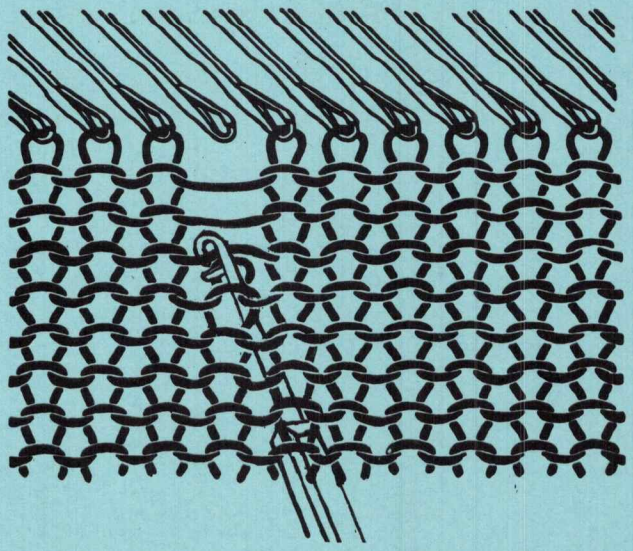
Knit 1, purl 1. Cast on an uneven number of stitches.

Skip the first stitch; drop the second stitch and rib. Continue ribbing every other stitch.

If you plan to do a lot of ribbing, you will be interested in the Passap Ribbing Attachment which is available from your Speed-O-Knit dealer. This ribber contains the full allotment of 201 needle spaces, which means it automatically knits all kinds of rib patterns, many of which were impractical before, such as Fisherman's rib and the knit 1-slip 1 pattern with the slip stitch on the knit side of the work. It also makes many knit-purl combinations: knit 1-purl 1, knit 2-purl 2, knit 3-purl 3, knit 6-purl 1; etc. There is an excellent instruction manual included with the ribber so anyone using a Speed-O-Knit will find the instructions easy to follow.

PICKING UP DROPPED STITCHES

You have learned that when you drop a stitch and run it back up with the green tool on the side facing you, you obtain a rib. Obviously you cannot correct dropped stitches in the same manner. Although the principle is the same, since you want to correct work in picking up a dropped stitch, you must pick it up so that the purl side is still facing you. For this reason you must use your green tool from underneath your work, rather than on top of it.



Cast on practice stitches and work 40 rows. Work 1 row, putting needles into free move.

1. Drop a stitch off the needle as you did in starting ribbing and let it run down.

2. Hold green tool underneath work, latch up and rounded part of hook toward you.

3. Insert hook through stitch so that hook comes out toward you. Here again it is much easier to insert hook through stitch several rows below the point where it has stopped.

4. Bring hook through work so that the latch is clear, the stitch being below the latch.

5. Catch first strand of yarn so it is between hook and latch, and pull it through the stitch.

6. As soon as you feel the yarn pull through the stitch, immediately bring green tool back up through work till stitch is below latch and hook is in position to catch next strand of yarn.

BE SURE to hold work down tightly, as you did for ribbing. You will soon get the feel of this and develop a rhythm. The main thing is this: As soon as you feel the yarn go through the stitch, don't pull the stitch out to any length, but at once bring hook back up into place, letting stitch fall back of latch. Also, if as you pull yarn through, you will tip the green hook slightly toward the knitter, you will be less likely to drop the stitch. This is what may happen, too, if you pull the stitch out to any length. It becomes loose and as you bring tool back into position, you may lose the stitch.

Practice slowly at first. Then work up speed.

7. When you get stitch back to the top, you will find it difficult to get the stitch back on the empty needle, since tool is under work. So, as you pull the last strand through, pull this stitch out a little bit and catch hold of work with fingers right at base of last stitch. Push hook up till stitch is back of latch. Then pull hook completely out of work, holding stitch in place with fingers. Turn tool around and insert the decker end through the stitch. Then you can easily hook the decker eye onto the hook of the empty needle and lever the stitch onto the needle.

After you have practiced deliberately dropping stitches and picking them up, do this. Put on practice work; work 20 rows; drop a couple of stitches off (not consecutive ones); but don't run them down. Put empty needles back in working position and continue knitting 10 rows. Then work a row, putting needles in free move.

Now you will see that you have the dropped stitches, but that another stitch has formed and continued to knit. This is usually the situation that will face you when you are actually working on something and discover you have dropped a stitch.

Pull down on your work, and you will be able to trace the line of the dropped stitch up to the needle. Drop this stitch off the needle and run it down to the point where it originally dropped. Now you have just the single stitch, and you pick it up in the same manner.

ALWAYS USE FREE MOVE for picking up dropped stitches.

CAUSE OF DROPPED STITCHES

1. Closed latch. At first this will happen although you are convinced all latches are open. As you work, you will soon spot a closed latch almost automatically. Remember, the latches are very sensitive and can be jolted shut. Always check. If you will glance along the needle hooks from the side, you will spot a closed latch much more easily.

2. Needles in incorrect working position. This can cause a single dropped stitch, although more often in a case like this, you will drop more than one stitch. Needles can be only a little off, as explained in Lesson 1, and you can lose stitches. Putting needles in working position also becomes automatic the more you work.

3. Brushes out of line. If you will put your needles in working position, without yarn, and work your lock back and forth, you will see the operation of the brushes that are located under the stripper. Their function is to keep the latches open. Move lock from right to left. Now look and see if all latches have opened. Do this several times to be sure, and if some still remain closed, very slightly press down on the brush to the right. You can even press a little forward. Now check to see if latches open. Check in the same way, working from left to right and adjusting the left brush if necessary.

   Actually mistakes are seldom caused by the knitter. Usually they are caused by the operator.

4. Yarn catches. Since most yarn is wound these days in pull skeins, you may often find that the yarn will catch in the skein. Although it may only be a slight pull, it can be sufficient to raise the yarn just high enough over the latches so that it will not catch and stitch has nothing to hold it. It is wise to keep the yarn running freely as you work.

5. Yarn not over the needles. This is especially true if you consistently lose the first or last stitch. In laying the yarn across the needles, most persons have a tendency to pull yarn slightly towards them. Even though you have first checked and found the latches open, this will cause the first latch to close. This is why it is a good idea to learn to work sideways in laying yarn. Also, at first, when you are concentrating on a good many things, it is very easy to get the yarn between the first two needles, although you are certain it is where it should be.

Everyone learning to use Speed-O-Knit has dropped stitches at first. Frustrating as it may be, especially when you are convinced in your own mind that everything is set just right, it will still happen. Don't become discouraged or blame it on the knitter. After a certain period of time--and not too long--you will find that you seldom have dropped stitches, or that when you do, you are most certain that you yourself have been careless.

To eliminate the possibility of dropping stitches because needles are not in exact working position, we recommend using the Plasti-Guide, an optional tool, which is available through The Institute. This guide, triangular in shape, is very easy to use. Simply lay it on the needle bed with the base touching the back of the numbered bar. Then slide it across.

4. Pull up the other free move knob. (Both knobs are now up.) Move lock back and forth and note that nothing happens--needles remain as they are. This is the complete free move which enables you to move lock from side to side.

5. Move lock to right side (always to the side opposite where the yarn is hanging).

6. Push both knobs down.

7. Move lock back to the left.

8. Needles are back in working position, and you are ready to continue.

Before you do any practicing, so that you will have a clear picture of the advantage of free move, do this. Pull down on your work as heavily as you did when the needles were in free move, and see what happens. You will probably pull all or part of your work off the needles, and the stitches that remain on will have closed latches. Being able to pull down on your work with no ill effects is going to prove most helpful--hence the importance of free move. If you have lost all or part of your stitches, cast on and start over.

Remove lock from the knitter and turn it over so you can see the underside. Refer to diagram in Lesson 1. As you look at the underpart, reach below and pull up the left free move knob. Note that this lowers the left free move cam and flipper, flat against the back of the lock. Now trace the path of the needle and note that as soon as the needle butt reaches the bottom of the tension cam, since the left flipper is down, there is nothing to guide the needle back into working position. Therefore, the needle stays down in free move.

Now reach back and pull up the right free move knob. Both flippers are down, and you can easily see why it is now possible to move lock freely back and forth with no damage, because there is nothing to guide the needles back into working position. This is complete free move. (When only one knob is up in partial free move, if you move the lock back before raising the other knob, your needles immediately return to working position and you soon find that you are ready to work, but your yarn is at the wrong side.)

Replace lock on side where yarn is hanging and push both knobs down. Now follow these simplified directions, starting with lock and yarn at the right.

1. Lay yarn across needles.

2. Raise right (outside) knob.

3. Move lock to left, knitting a row and putting needles in free move.

4. Remove counter.

5. Raise other knob and move lock back and forth several times. Needles are in complete free move.

TO BRING NEEDLES BACK INTO POSITION

6. Both knobs are up.

7. Move lock to side opposite where the yarn is hanging. (If you were actually working on a garment, you would remove the counter as this move would register, but would not be an actual knit row.)

8. Push both knobs down.

9. Move lock across, thus bringing needles back into working position. (Again, this move would register but would not be an actual row.)

10. Replace counter and you are ready to continue.

Work a few rows and end with yarn and lock on the left side. To put needles in free move when starting from the left:

1. Lay yarn across needles.

2. Raise left (outside) knob.

3. Move lock to right, knitting a row and putting needles in free move.

4. Remove counter.

5. Raise other knob. (Both knobs are now up.)

6. Move lock to left. Lock is now opposite the yarn.

7. Push both knobs down.

8. Move lock back to right, bringing needles into working position.

9. Replace counter and you are ready to continue.

In practicing free move, you may get into trouble, but there are ways of correcting it without having to remove work and start over.

Start with lock and yarn at the right and follow steps 1 through 4 for using free move. Needles are now in free move with lock and yarn at the left. Without doing anything else, move lock back to the right. Now your needles are working <u>even though</u> one knob is up. Do you see why? Again, refer to the under part of lock and visualize the reason for this. Do you see that if one flipper is down and one is up, when you return, the flipper that is still up will guide the needles back out? Now look at your work and see the spot you are in. Needles are in working position, but lock is at one side and yarn is at the other. Regardless of what you now do with the free move knobs, you CANNOT move lock back to yarn, because needles are in working position, you have no yarn to lay across, and the minute you move lock across, work falls off.

However, you can get back into correct position in one of two ways:

a. Remove lock from knitter and replace at side where yarn is.

b. Bring needles into rest position (as far forward as they will come) and then move lock across to where yarn is. Then put needles back in working position.

Practice this diligently. Then use two colors of yarn and work one row of each color. This will give you more practice in using free move without thinking. Work with the two colors until you can do single rows of color without referring to the following directions:

We shall refer to the colors as A, the color you are now using, and B, the second color. Starting with yarn and lock at right,

1. Lay B across needles, short end of yarn at the right (and hold the short end until you feel yarn catch). Raise the outside knob and knit the row. Lock and B are now at the left, A at the right. Next row is to be with A. Since you are opposite the yarn you want to use, you...

2. Push the knob down and return to the right, bringing needles into position.

3. Lay A across the needles and knit the row. Can you see why you didn't have to use free move for this row? Because B was already at the other end and is just where you want it. Now lock, A and B are at the left.

4. Lay B across needles. Raise outside knob. Why do you need free move now? Because after you knit this row with B, you must be able to return lock to opposite side in order to use A.

5. Work the row with B. Since this puts you opposite the yarn you want, push knob down and return to the left.

6. Work with A. Again, no free move because B is already in position.

JUST REMEMBER THAT WORD - OPPOSITE - IN USING FREE MOVE.

Now let's make some errors so you will see how to correct them.

Start with lock and both yarns at right.

1. DO NOT raise either knob, but work one row with B. (In other words, although you should, you have forgotten to use free move.) Lock and B are at the left, but the next row is to be done with A and you CANNOT return lock to the right to get A, regardless of position of knobs. Your needles are in working position, and work will fall off if you return lock. So either remove lock and replace at right or put needles in rest. Then move lock back.

2. Work row with A. Now lock and both colors are at left.

3. Raise outside knob and work row with B. Since lock is opposite A, you are in the correct position to bring needles back out. But you now forget to push the knob down, although you can safely move lock back to left.

4. Still forgetting that the knob is up, work next row with A.

You now find yourself in a spot where you have lock and both colors right where you want them, but this time, no needles. What to do? Again you have two choices:

a. Push knob down and bring needles into working position, either using hand or block ruler. But this doesn't help you learn free move. So the better method is...

b. Since the object is to bring the needles back into position, obviously you must get the lock opposite the yarn first. Again you can remove lock and replace at other side. But it is much simpler to raise both knobs (complete free move), move lock to opposite side, push both knobs down, and return lock to other side, bringing needles back into position.

RIPPING

You can rip out rows of knitting, if you should make an error, without having to remove work.

Cast on 20 stitches and work 20 rows.

In order to rip rows easily, do the following:

1. Put needles in free move.

2. Bring needles slightly forward so that they are clear of the striking comb, but being sure to keep stitches where they are, in the needle hooks.

3. Hold slightly down on your work, since it has a tendency to curl up and come off.

When you have the needles in position to rip, take hold of the yarn where it is attached to the last needle. Draw yarn away from stitches as though it were a drawstring. You will be able to see that this tightens the stitches on the needles.

The secret of easy ripping is to keep the stitches right in the curve of the needle hook.

The idea is that you are going to bring the stitches of the row below back onto the needles, letting the last row come out.

Hold your yarn tightly close to the needles with one hand. With the other hand you are holding down on the work. Now with an upward jerk of the yarn, you will see the stitches flip up onto the needles. Practice very slowly at first and watch the way the stitches move so that you will better understand what you are doing. As you gain confidence that you won't lose everything, you will be able to flip quite a few stitches at a time.

Watch the end stitches in particular, as you may have to loosen your hold on the work here, especially for the last stitch. Try to follow the path of the yarn as the top row unravels so that you can better guide the yarn if it gets on the wrong side of the needle. However, if you do keep the stitches right there at the curve, you won't have any trouble. You can rip from right or left. If you are working on a garment and have to undo some rows, remove counter. Then knit without counter until you have done the same number of rows you ripped out.

When you are through unravelling, push needles back to free move (stitches are already in place but needles are slightly forward) so that the needle heads are flush with the striking comb. Bring needles back into working position by using free move knobs.

Free move is used to do all the following things:

1. Working with colors where you use an uneven number of rows for any color. (If you have even rows, you have no problem because yarn is always where you want it.)

2. Ribbing

3. Picking up dropped stitches.

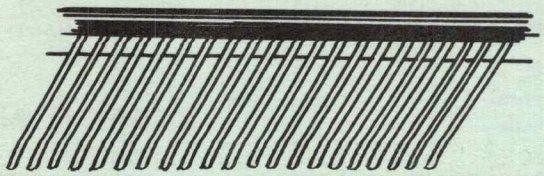
4. Ripping

5. Locking work on needles when you decide to stop knitting. This saves having someone pull the work off accidentally or bumping into the needles that are in position and knocking them out of place. Also, it permits you to put lock at center of Speed-O-Knit if you wish to put knitter in case.

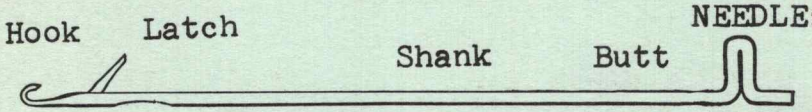
6. Or, simply to be able to sit back and admire your work. By using free move, you can have a clear view of your work and can lift work up to look at the underneath side, which is the right side, with no danger of pulling work off.

You have been practicing No. 1 and No. 4 as listed above. No. 5 and No. 6 are self-explanatory. The others will be explained in future lessons so practice madly.

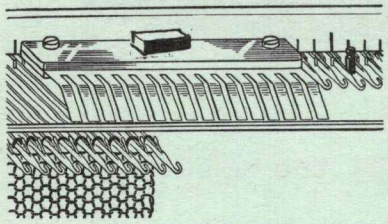
See you next week.



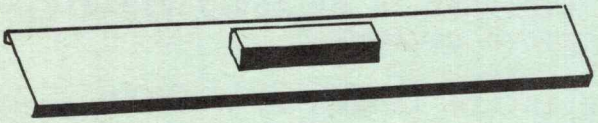
STRIKING COMB: The striking comb is at the extreme front of the knitter. It is a series of steel pins, covered by a red metallic bar. Its purpose is to keep stitches divided in their respective places.



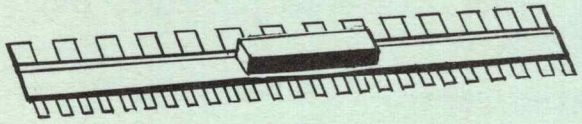
NEEDLE: Illustration shows different parts.



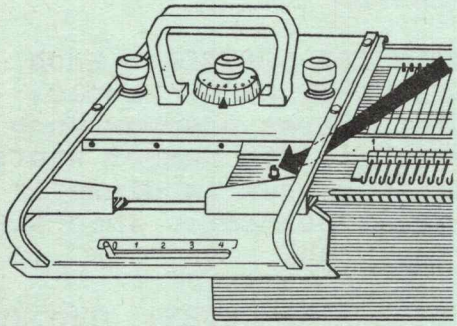
FEATHER COMB: There are four of these. Each has a red lock. To unlock, turn red lock vertical to comb. Raise comb. To reset: first notice that underpart of comb has two holes--these fit over the small metal pegs that are between needle hooks. Place comb securely on pegs, making sure it is pushed flat to the bed. Turn lock back to horizontal position.



BLOCK RULER



DIVIDED RULER



RELEASE BUTTON: You will find one at either end. Purpose is to enable you to remove lock at either end. Push lock as far as it will go, press button and remove. Lock can be replaced without pushing button.

TOOLS: There are four tools, the handle of each a different color. They will be described fully at the time you begin to use each one.

To get best results, read only one step at a time. Then do as directed before proceeding to the next step. In your practice work, use a lightweight yarn, such as baby yarn or sock yarn.

PREPARING TO CAST ON

1. All needle butts are at the back of the bed. This is NEUTRAL POSITION.

2. Slide lock to right side of knitter.

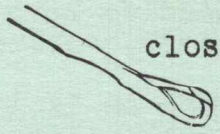
3. Note that the red numbered scale is numbered from the center out, both to the right and to the left. The actual center--0--is NOT over a needle. Work should always be centered so long as you are working with an even number of stitches.

4. Slide center 40 needles forward toward you as far as possible so that the needle butts are now against the front of the knitter. This is REST POSITION. (You now have 20 needles out to the left of the 0 and 20 needles out to the right of the 0.)

5. Place block ruler, handle up, on needle bed, so that it rests securely against back channel. (The back edge of the ruler will cover the needle butts not in use.)

6. Push the 40 needles back so that the butts rest securely against the block ruler.

7. Look at your red tool. One end is a hook; the other end consists of two decker needles with eyes. Using the hook end, slide it along just inside the hooks of the needles in order to open all latches.



8. Set row counter on 0 and be sure tripper is in place.

9. Set tension on No. 4. Set stripper tension on No. 0. (Keep tensions at these settings during all lessons until you receive the complete lesson on tension.)

10. Be sure both free move knobs are down and keep them down always unless otherwise stated.

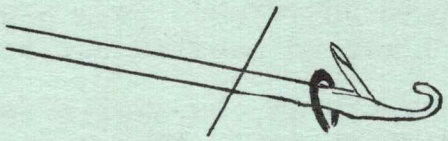
11. Place feather combs so that they cover the outside needles. It makes no difference how many needles are covered by the feather combs, SO LONG AS the outer needles are covered. (The reason for having four combs is that later you may wish to do two pieces at once and you will have combs to cover the outer needles of both pieces.)

CASTING ON

NOTE: Always cast on from left to right.

1. Make a slip knot at the beginning of your yarn by forming a small loop then pulling a long loop through the small one.

2. Put slip stitch over the first needle at the left. Tighten this stitch just enough so that it will slide easily on the shank. Push stitch away from you so that it goes back of the latch towards the striking comb.



3. Take hold of yarn with thumb and index finger of right hand (letting short end of yarn hang down). Hold yarn in position under needles against back of knitter with left index finger.

4. Holding yarn about 2 inches away from left finger <u>with no slack</u>, bring yarn up on right side of next needle; catch in hook of needle; bring down on left side and push toward striking comb, moving left finger to hold yarn in place.

Casting on is like writing in longhand a series of the small letter "e".

Don't try to lay yarn far back on the needle. All you need do is simply catch it in the hook at the very tip and then slide it back.

5. Continue in this manner until all stitches have been cast on, being very careful not to pull yarn too tightly around needle shank and, at the same time, not leaving it too loose. You will soon learn to judge this.

WORKING POSITION

NOTE: It is very important that needles be in exact working position. A fraction of an inch out of line either way can cause dropped stitches or stitches not working. This, too, you will soon learn to judge.

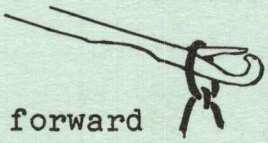
1. Remove block ruler from needle bed.

2. Take hold of ruler with both hands, holding it at the ends, with handle facing away from you. Place ruler so that handle is immediately under the needles and the needle hooks are touching the ruler. Slowly push away from you until the handle hits squarely against the back of the knitter. Try not to tip the ruler at top or bottom.

Since it is hard not to tilt the ruler, learn to check your needles after putting them in working position. Correct working position is this: the point of the latch should be through and on the far side of the striking comb and should slightly cover the stitch. To check, glance down at the needles on the far side of the striking comb. Don't try to check by looking through the striking pins.

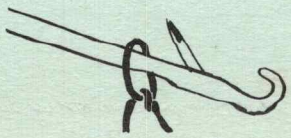
Correct

If needles are pushed too far away from you, the latches will close. Then when you lay the yarn across to knit, there will be nothing to hold the yarn, and instead of a new stitch being formed, the work will fall off.



Too far forward

If needles have not been pushed far enough, there will be some of the needle shank showing between the stitch and the latch point. Then when you lay the yarn across, it will fall between stitch and latch instead of in the hook of the needle. Here, too, the work will fall off.



Not far enough

KNITTING

1. Check working position, making sure all latches are open. (If you will glance sideways along the needle hooks, you can spot a closed latch more easily than when looking directly at the needles.)

2. Use only one hand in laying the yarn in position. Get in the habit of holding yarn close to the first needle, and as you pass your hand along the length of the needles, let the yarn run through your fingers into place along the hooks of the needles. If you will hold yarn taut until you start across, you will find it much better. The normal tendency is to pull yarn towards you, and invariably this will close the first latch. By holding it taut, just to start over the first needles, then loosening, you avoid trouble. This is the only time you do hold the yarn with any tension. The rest of the time, you only hold the yarn to control it, holding it easily between your fingers and letting it slide through.

3. After yarn is laid across hooks, let it hang straight down at the left side, holding lightly with fingers.

4. Move lock from right to left.

You have now knit 1 row and counter reads 1.

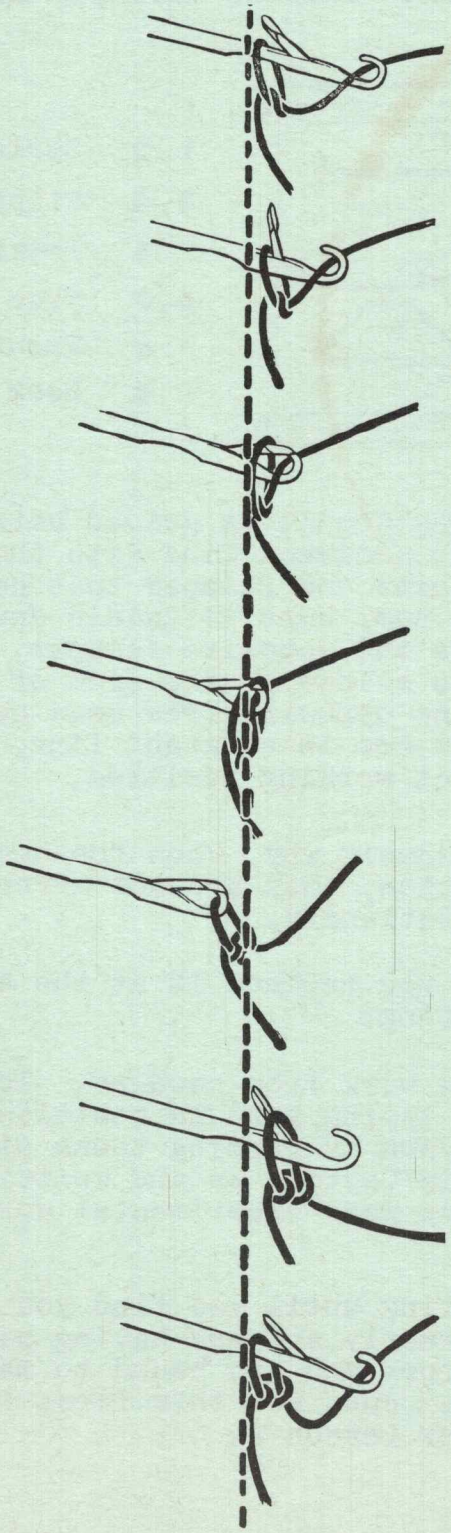
At first you may run into some difficulty. The lock may be hard to push; you may have double stitches on some of the needles; you may have loose yarn lying over several consecutive needles or you may find some empty needles. All these are caused by errors in casting on. It may have been too tight, or too loose. You may have to experiment several times. When you push your lock across the first row, press down slightly, just as you would if ironing. And work the first row slowly.

Always check the first row before continuing. Another thing you may discover is that some of the latches may have closed or that other latches, though open, have the stitch on top. (This is caused by a tight cast on.) If this is true, simply bring your needle out towards you until the stitch is back of the latch. Then push needle back into position. ALWAYS check to see that all latches are open. The latches are very delicate, and sometimes a slight jolt will cause them to close, until you become smoother in operating the lock.

5. Now lay yarn from left to right and move lock to the right. The yarn and the lock must always move in the same direction.

You have now knit two rows and counter reads 2.

Let's stop here and see how the actual stitches are formed.



You start with the stitch in back of the latch, latch open, yarn lying in hook.

As needle is pulled back, note that the stitch itself, pushing against the latch, forces the latch to close.

When the latch is completely closed, the yarn is securely hooked in the needle.

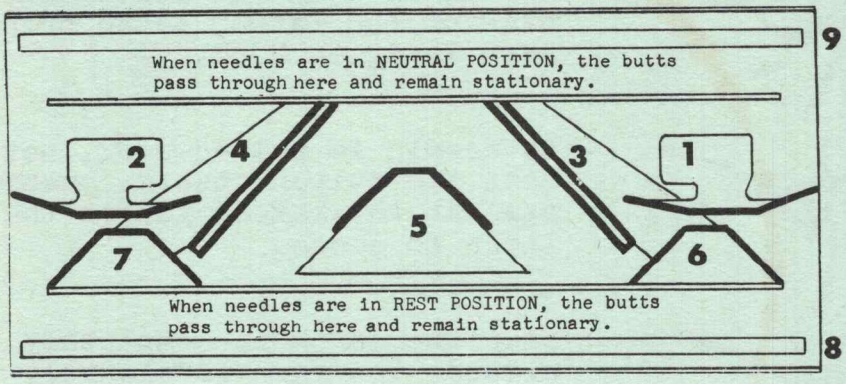
And, as needle is pulled further back, the yarn is pulled through the original stitch,

thus making a new stitch.

Then, as the needle is pushed forward, again note that it is the stitch itself that forces the latch to open.

And the needle is returned to working position, stitch back of latch and latch open, ready to receive yarn for the next row.

I think it is interesting to know that the only function of the lock is to move the needles back and forth. There is no other tricky mechanism in the lock--it moves the needles, forcing the stitches to work the latches, thus doing the knitting. To prove this to your own satisfaction and because it will immediately give you a clearer picture of how the knitting is done, remove your lock by pushing the release button and sliding the lock off the knitter. Then turn the lock over. This is what you will see.



1,2	Spring
3,4	Flipper
5	Tension Cam
6,7	Free Move Cam
8	Front Runner
9	Back Runner

As the lock is moved, the butt of the needle is guided between the free move cam and spring (this is in a direct line with the butts when in correct working position); hits the flipper that carries the butt over to the center tension cam; butt is guided down side of this cam to the bottom, then hits the opposite flipper, which remains stationary, so that the butt slides up the side of this flipper and is guided out between the opposite free move cam and spring. And, since cams and springs are in an exact line, the needles are again lined up in correct working position.

Also, while lock is off, see for yourself why, when the needles are in rest position or in neutral position, they are not affected by the moving of the lock and remain stationary.

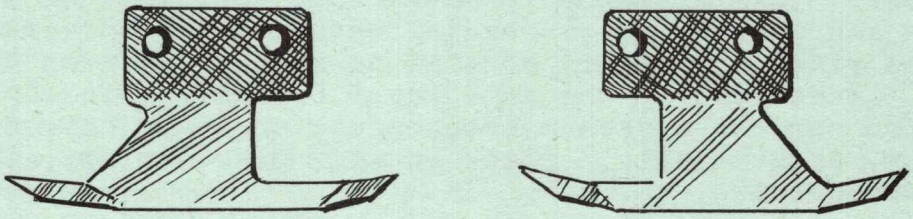
Replace your lock, making sure that you replace it at the end where the yarn is hanging. Continue knitting.

After knitting about 20 rows, remove work from needles. To do this, you simply move lock across WITHOUT laying yarn in position first. You might just as well conserve on yarn by ripping these pieces and using the yarn over and over for this casting on and knitting practice. Later on you will want to save your experimental work for future reference.

Please practice casting on and knitting until you find you are judging the tension of the yarn correctly and are having perfect cast-ons. Don't worry about the errors you are bound to make, or the stitches you will no doubt drop. Just get this first lesson down pat, and you will be all set for Lesson 2.

NEEDLES NOT RETURNING TO WORKING POSITION

First check to be sure your free move knobs are down. If they are, remove lock and look at springs just above free move cams. (See diagram in Lesson 1.) Spring could be broken or badly bent and should be replaced. Note from diagram below that there are two different springs, one on the right and one on the left. Be sure to specify the correct one when ordering a replacement. You can easily replace spring yourself.



LOCK WORKS EASIER GOING IN ONE DIRECTION

If you find the lock works very easily going one way and then is hard to slide returning in the other direction, check the following:

1. If it has been some time since you thoroughly cleaned your knitter, give it a good scrubbing. And always, after a thorough washing, be sure to oil lightly.

2. Check channels in which the needles slide to see if any are bent or seem to have rough spots at either side that might be rubbing on the needle butts. If any channels are bent, knitter must be sent to the shop for replacement. However, this rarely happens.

3. Check the space between the free move cams and the springs. Use one of your extra needles to make this check. The butt of the needle should slide freely through this space, just barely clearing the sides of both the cam and the spring. If the cam and spring touch the butt, simply bend the spring slightly away from the cam (since you obviously can not move the cam). If there is too much space on either side of the butt, bend the spring slightly toward the cam.

4. Check to see that tension knob is screwed firmly in place.

If after you have made all the above checks, lock still moves stiffly, try a thorough oiling. This alone usually takes care of hard-moving lock, but it is always wise to check first for other things that might be amiss.